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**U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**



**FOUR YEAR  
AUTHORIZATION**

**FISCAL YEARS  
1979—1982**

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U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FOUR YEAR AUTHORIZATION FY 1979 - FY 1982

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for several years to determine what  
information could be obtained.

It is not until the following year that

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A B I L L

To authorize appropriations for activities and programs carried out by the Secretary of the Interior through the Bureau of Land Management.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That pursuant to Section 318(b) of the Federal Land Policy and Management Act of 1976 (31 U.S.C. 1301 note), there are hereby authorized to be appropriated the following sums for activities and programs administered through the Bureau of Land Management:

- (a) For management of lands and resources, excluding emergency firefighting and rehabilitation: \$290,000,000 for fiscal year 1979, \$320,000,000 for fiscal year 1980, \$350,000,000 for fiscal year 1981, and \$380,000,000 for fiscal year 1982;
- (b) For land acquisition, construction, and maintenance: \$20,000,000 for fiscal year 1979, \$22,000,000 for fiscal year 1980, \$25,000,000 for fiscal year 1981, and \$27,000,000 for fiscal year 1982;
- (c) For implementation of the Act of October 20, 1976 (31 U.S.C. 1601): \$105,000,000 and such additional sums as are necessary for payments for fiscal year 1979, \$108,000,000 and such additional sums as are necessary for payments for fiscal year 1980, \$111,000,000 and such additional sums as are necessary for payments for fiscal year 1981, and \$114,000,000 and such additional sums as are necessary for payments for fiscal year 1982;



(d) For implementation of Section 317(c) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1747): \$45,000,000 for loans for fiscal year 1979, \$50,000,000 for loans for fiscal year 1980, \$57,000,000 for loans for fiscal year 1981, and \$65,000,000 for loans for fiscal year 1982; and

(e) Such additional or supplemental amounts as may be necessary for increases in salary, pay, retirements, and other employee benefits authorized by law, and for other nondiscretionary costs.



SUMMARY OF FOUR YEAR AUTHORIZATION 1/

	<u>FY 1978</u>	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
ENERGY-ONSHORE	\$31.5	\$32.4	\$37.0	\$39.0	\$42.0
ENERGY-OFFSHORE	57.5	67.7	70.0	75.0	80.0
NON-ENERGY-ONSHORE	6.6	8.2	11.0	15.0	13.0
<b>TOTAL-ENERGY &amp; MINERALS</b>	<b>\$95.6</b>	<b>\$108.3</b>	<b>\$118.0</b>	<b>\$129.0</b>	<b>\$135.0</b>
 LANDS AND REALTY					
Service Charges, Deposits & Forfeitures (R/W Related)	\$24.9	\$28.0	\$31.8	\$33.7	\$35.4
	(10.4)	(32.8)	(30.8)	(30.8)	(27.8)
 FOREST MANAGEMENT					
O&C -Resource Management 2/	8.8	8.8	8.8	8.8	8.8
	(28.0)	(32.0)	(32.0)	(32.0)	(32.0)
 RANGE MANAGEMENT					
Range Improvement Approps.	\$30.3	\$30.3	\$35.0	\$38.0	\$40.0
	(8.8)	(8.8)	(8.8)	(8.8)	(8.8)
 RECREATION					
	\$9.4	\$20.1	\$21.5	\$23.5	\$30.0
 SOIL, WATER, AND AIR					
	\$11.5	\$17.6	\$19.5	\$22.0	\$28.0
 WILDLIFE					
	\$6.4	\$9.9	\$10.9	\$13.0	\$17.0
 FIRE					
Fire Fighting & Rehabilitation	\$8.3	\$12.0	\$15.6	\$18.0	\$22.0
	(4.8)	(4.8)	(4.8)	(4.8)	(4.8)
<b>TOTAL RENEWABLE RESOURCES</b>	<b>\$74.7</b>	<b>\$98.7</b>	<b>\$111.3</b>	<b>\$123.3</b>	<b>\$145.8</b>
 PLANNING					
DATA MANAGEMENT	\$12.2	\$12.8	\$10.9	\$10.9	\$10.9
	12.6	17.0	19.0	22.3	19.5
<b>TOTAL PLANNING &amp; DATA MGMT.</b>	<b>\$24.8</b>	<b>\$29.8</b>	<b>\$29.9</b>	<b>\$33.2</b>	<b>\$30.4</b>
 CADASTRAL SURVEY					
	\$18.1	\$20.0	\$21.8	\$21.8	\$21.8



	FY 1978	FY 1979	FY 1980	FY 1981
LAW ENFORCEMENT	\$ .5	\$1.2	\$2.2	\$4.1
GENERAL ADMINISTRATION	<u>3.5</u>	<u>4.0</u>	<u>5.0</u>	<u>7.5</u>
TOTAL LAW ENFORCE. & ADMIN.	<u>\$4.0</u>	<u>\$5.2</u>	<u>\$7.2</u>	<u>\$11.6</u>
<u>TOTAL MGMT. OF LANDS &amp; RESOURCES</u>	<u>\$242.1</u>	<u>\$290.0</u>	<u>\$320.0</u>	<u>\$380.0</u>
BUILDING CONSTRUCTION O&C Buildings	\$3.6 (8.0)	\$6.3 (5.0)	\$7.2 (3.0)	\$9.0 (3.0)
RECREATION CONSTRUCTION O&C Recreation Construc <sup>n</sup>	\$1.4 (0.0)	\$ .6 (4.0)	\$ .8 (2.0)	\$1.1 (2.0)
TRANSPORTATION CONSTRUCTION O&C Transportation Constr.	\$5.0 (10.6)	\$4.2 (11.2)	\$4.2 (4.0)	\$4.5 (4.0)
<u>TOTAL CONSTRUCTION</u>	<u>\$9.9</u>	<u>\$11.0</u>	<u>\$12.1</u>	<u>\$14.6</u>
ACQUISITION O&C Acquisition	\$1.5 (2.0)	\$1.7 (1.0)	\$1.7 (1.0)	\$1.7 (1.0)
BUILDING MAINTENANCE O&C Building Maintenance	\$2.0 (1.0)	\$2.0 (0.0)	\$2.4 (1.0)	\$2.5 (1.0)
RECREATION MAINTENANCE O&C Recreation Maintenance Rec., Dev. & Operations	\$3.1 (2.0) (0.3)	\$3.1 (0.0) (0.3)	\$3.3 (1.0) (0.3)	\$3.5 (1.0) (0.3)
TRANSPORTATION MAINTENANCE O&C Trans. Maintenance	\$2.3 (4.9)	\$2.3 (5.0)	\$2.5 (6.0)	\$2.7 (6.0)
<u>TOTAL MAINTENANCE</u>	<u>\$7.3</u>	<u>\$7.3</u>	<u>\$8.2</u>	<u>\$8.7</u>
<u>TOTAL ACQUISITION, CONSTRUCTION AND MAINTENANCE</u>	<u>\$18.7</u>	<u>\$20.0</u>	<u>\$22.0</u>	<u>\$27.0</u>
PAYMENTS IN LIEU OF TAXES	\$100.0	\$105.0	\$108.0	\$111.0
				\$119.0



	<u>FY 1978</u>	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
MINERAL DEV. IMPACT LOANS	--	\$45.0	\$50.0	\$57.0	\$65.0
OTHER					
Service Charges, Deposits & Forfeitures (Repair of Lands & Facilities)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)
TRUSTS	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)
PERMANENTS	(289.4)	(321.2)	(350.0)	(357.6)	(388.0)
TOTALS OF PROGRAMS SUBJECT TO AUTHORIZATION	\$360.8	\$460.0	\$500.0	\$543.0	\$586.0

1/ Budget authority in parentheses is shown for information purposes. It is not subject to authorization.

2/ Totals may not add due to rounding.

2/ Includes budget authority for all land and resource management activities on Oregon and California Grant Lands in Western Oregon other than that shown in Acquisition, Construction and Maintenance.



## FOUR-YEAR AUTHORIZATION

### ENERGY ONSHORE

#### GOALS

The Bureau's goals in managing the onshore energy leasing programs are:

- Orderly and timely development of the resources to meet National needs with adequate consideration given to other land and resource values.
- Minimizing environmental impacts from development.
- Assuring a fair return to the public for the resources sold.

#### BACKGROUND

BLM's onshore energy leasing programs make oil, gas, geothermal resources, coal, oil shale and uranium available as provided for in the Mineral Leasing Act of 1920 as amended, the Coal Leasing Amendments Act of 1975, the Geothermal Steam Act of 1970, and associated regulations.

#### Oil and Gas

Leases issued through the onshore oil and gas program supplied approximately 5.5% of domestic oil production and 5% of domestic gas production in 1975. Royalty receipts based on this production amounted to \$239 million in FY 1975 and \$251 million in FY 1976. An average of 12,000 oil and gas leases have been issued annually over the last five years. The majority of these leases were issued noncompetitively through the simultaneous filing procedure. Under this procedure, applications are filed within a certain five-day period for specific tracts available for lease. If more than one application is received for a given tract, the priority of filing is determined through a public drawing. A \$10 filing fee is collected with each application; FY 1976 revenues from these filing fees amounted to over \$15 million. Effective February 1, 1977, the annual rental rate on noncompetitive leases was increased from fifty cents per acre to one dollar per acre. Approximately 13 million acres are leased annually; about 88 million acres are currently under oil and gas lease.

#### Geothermal

The Bureau initiated the geothermal leasing program in January 1973 by holding a competitive lease sale in California and accepting noncompetitive lease applications. Through May, 1977, forty-four competitive sales have been held. Leases have been issued on 177 units covering approximately 350,000 acres; bids have been accepted on an additional 14 units. Six thousand noncompetitive lease applications have been filed, and 872 leases covering 1.5 million acres have been issued. Of the remaining applications, 3,200 have been withdrawn or rejected and 1,900 are awaiting action by BLM, Forest Service or other Federal agencies. Revenues collected through March, 1977, amount to \$17.1 million. There is currently no production from Federal leases; however, efforts are underway to begin production in one area in late FY 1978, and other production activities are expected in FY 1979.



MANAGEMENT OF LANDS  
& RESOURCES







### Oil Shale

The Department's oil shale program is a prototype program designed to stimulate private industry to produce commercial quantities of oil from shale, insure that the environmental integrity of the area is maintained, permit an equitable return for all parties, and develop leasing management expertise for oil shale production. Development of the program began in January, 1970, with establishment of an Oil Shale Task Force. In November, 1971, the Department requested nominations of tracts and in April, 1972, selection of six tracts was announced - two each in Utah, Wyoming, and Colorado. Lease sales were held in early 1974 with only the Colorado and Utah tracts being leased. Due to environmental, legal, and technical problems encountered in development planning, lessees of all four tracts requested suspension from development. The Department granted one-year suspensions in Colorado in September and in Utah in October of 1976. The suspensions extended the period of payment of the last two bonus bid installments but required the lessees to maintain environmental monitoring efforts on the tracts. The suspensions in Colorado have expired, and development activities are proceeding. The two tracts in Utah are under Court-ordered suspensions pending resolution of various issues, including State land selections. To date, approximately \$200 million in bonus payments have been collected from the Colorado tracts; payments from the Utah tracts are being held in escrow pending settlement of the State land selection issue. Certain expenditures can be credited against the last two bonus installments, thus the amount of the remaining payments is uncertain. The Department is considering offering additional tracts for lease for the purpose of evaluating the in situ development method. The Colorado tracts will be utilizing modified in situ technology. No time-frame has been identified for the lease sale decision.

### Coal

It is estimated that the Federal government owns roughly 60 percent of western coal resources. Further, due to ownership patterns, the Federal government influences the development of nearly 80 percent of all western coal resources. Historically, and until the late 1960's, the Department of the Interior played a reactive role in leasing federally owned coal, responding to industry applications for coal leases on a case-by-case basis. Subsequent to a coal lease study, the Department halted the issuance of coal leases and prospecting permits to reassess coal leasing policies. The study showed that the acreage of coal under lease on public domain was skyrocketing while production from Federal leases was declining. Acreage under lease had increased from about 80,000 acres in 1945 to about 778,000 acres in 1970. Production during this period had declined from about 10 million tons in 1945 to 7.4 million tons in 1970.

From May 1971 until February 1973, no additional coal leases were issued by the Bureau of Land Management. In February 1973, the Secretary of the Interior announced a new coal leasing policy, which included both short-term and long-term actions. Short-term leasing criteria were designed to supply established operators with sufficient reserves to continue operations and supply existing markets. The long-term policy included development of an environmental impact statement (EIS) on the Department's coal



leasing program, supplemented as necessary by regional or individual EIS's. A programmatic statement was published in 1974 and regional EIS's are currently being prepared.

Anticipating accelerated coal development and possible resumption of leasing activities, the Department initiated a program in FY 1975 to evaluate disturbance problems and reclamation potential of lands that could be disturbed by coal mining. The Energy Minerals Rehabilitation Inventory and Analysis (EMRIA) program is administered by BLM but relies heavily on cooperative agreements with Geological Survey and Bureau of Reclamation. Information collected through this program provides the Department with environmental data necessary for use in the planning and environmental impact analysis processes as well as in development decisions, mining plan requirements, and stipulations.

In late 1976 and early 1977, the Department issued several regulations to implement the Federal Coal Leasing Amendment Act of 1975 (P.L. 94-377). The regulations deal with diligent development and continuous operation requirements, definition of commercial quantities, exploration licenses, surface management and mining operations, and the coal leasing process. In addition, the Department has signed cooperative agreement with six states for the enforcement and administration of surface coal mine reclamation standards.

Coal production from public lands has increased 2-1/2 times since 1973 to 33.2 million tons in FY 1976. Total acreage under lease has only increased 17,000 acres for that period. As of June 30, 1976, there were 529 coal leases on public lands covering approximately 795,000 acres. Receipts from coal leases amounted to \$7.2 million in FY 1976. Coal royalties are expected to exceed \$100 million by 1985.

#### PROGRAM ACTIVITIES

##### Oil and Gas Leasing

Major activities of this program include issuing leases, processing assignments, reviewing development plans, and performing compliance checks. In addition, under the Naval Petroleum Reserves Production Act of 1976 (P.L. 94-258), the Department of Interior has jurisdiction over the National Petroleum Reserve - Alaska. BLM is responsible for management and protection of the surface resources in NPR-A. The oil and gas leasing program is funded at \$9.0 million in FY 1978 with approximately 334 positions. Program operations are as follows, with outputs of FY 1978 included. Approximately 11,000 leases will be issued, each requiring about 2.5 days of effort. This includes a field exam, preparation of an environmental analysis record, adjudication, and office work. Around 38,000 assignments and transfers will be processed at one-third day of work each. Two thousand development plans will be reviewed in conjunction with the U.S. Geological Survey, each requiring an average of two days; and 6,900 compliance checks will be performed at 1.25 days each.



### Geothermal

Major activities of this program include issuance of competitive and non-competitive leases. Much emphasis is placed on environmental considerations, with detailed environmental analysis records being prepared before tracts are leased. State environmental concerns have slowed lease issuance in some states, particularly California and Oregon. Interest in obtaining noncompetitive geothermal leases is stable, with approximately 700 applications being submitted annually. An average of 12 competitive sales are held yearly. As lessees move into development activities, program emphasis will include development plan review, formulation of stipulations, and compliance work. Furthermore, when commercial quantities of steam are discovered on a lease, permit applications for steam lines, roads, etc. are anticipated. The FY 1978 program is funded at \$2.5 million, with 71 positions.

### Oil Shale

BLM's principal workload is in administration of the four prototype leases; this has been primarily monitoring pre-development operations for adequacy of stipulations and compliance. Although the Department suspended development activities on the four leases for one year, the companies had to maintain environmental monitoring efforts during the period of suspension and BLM's workload was essentially unchanged. While the Utah tracts are now under court-ordered suspensions, development activities on the two Colorado tracts are proceeding. BLM will continue to monitor these activities to assure protection of surface resources. Effort is also being directed to processing mineral patent applications on oil shale lands in response to a Colorado District Court ruling. The program is funded at \$.9 million and 21 positions in FY 1978. Congress added \$300,000 to the FY 1978 budget for oil shale to facilitate development of this resource; this is included in the \$.9 million.

### Coal

Major activities of this program are administration of leases, environmental analysis and impact statement (EAR, EIS) preparation, and collection of data to determine reclamation potential. Lease administration includes adjudication and processing of preference right and short-term lease applications; lease modifications and assignments; readjustments; predevelopment field investigations; exploration/mining plan evaluation; and compliance. The EIS effort includes preparation of eight regional EIS's initiated in FY 1977 and initiation of one additional regional EIS. Also work on a new coal programmatic EIS will be initiated in FY 1978. A regional EIS is estimated to cost about \$1.3 million, based on experience to date; this cost includes other agency participation and covers approximately twenty months.

The reclamation data effort provides

for site-specific reclamation studies on eight sites, water studies (work done by Geological Survey) covering broader areas, soil inventories, and revegetation trials. It also includes maintenance of similar studies



initiated in previous years. Total coal leasing funding in FY 1978 is \$19.1 million, with 239 positions.

#### SITUATION

Before discussing the current situation as related to specific energy commodities, it should be recognized that creation of the Department of Energy could impact the four-year requirements for BLM. The following discussion and authorization proposals assume that BLM will maintain current responsibilities. Changes in the request will be submitted as appropriate.

#### Oil and Gas Leasing:

Although the number of leases issued in FY 1976 declined from previous years, new oil and gas discoveries near the Wyoming/Idaho border and in Nevada are currently stimulating demand for additional leases. Expected energy legislation which allows oil and gas prices to rise and thus makes exploration and development more attractive will further impact the Bureau's oil and gas program, both in increased numbers of leases to be issued and in increased development plan reviews and compliance work. While additional capability was requested in FY 1978 to eliminate the existing backlog of lease assignment requests, perform more compliance checks, and review additional development plans, no additional funds or manpower were made available. This requirement thus is carried into FY 1979. Potential resource production is at stake both in development plan reviews and in the over 4,000 assignments awaiting processing.

On April 5, 1977, the Department assumed all responsibility for protection of environmental, fish and wildlife, recreational, historical, and scenic values in the National Petroleum Reserve - Alaska. As exploration of the Reserve proceeds and expands to include other resource values, this surface protection workload will increase. Two studies directed by the Naval Petroleum Reserves Production Act must be submitted to Congress by January 1, 1980; Congress will then decide how to develop the known petroleum resources and protect and preserve the other resource values. Development of the NPR-A resources will increase BLM's surface protection workload; if leasing actions were directed, BLM could be designated the agency to conduct this activity and BLM's workload would further increase.

#### Geothermal and Oil Shale

Current program status was covered in previous sections. Programs are expected to remain at this level of activity through the four-year authorization period. While additional oil shale leases may be called for, there are no plans now to accelerate the program; for this reason, the program is level.

#### Coal Leasing

The Department is currently reviewing various coal policy options. At the same time, it is recommending that the Justice Department appeal the U.S. District Court decision of September 27, 1977 (National Resource Defense



Council v Hughes) which restrains Interior from issuing Federal coal leases. The thrust of the coal program during the authorization period will largely be determined by the outcome of the government's court appeal and Interior's policy review. As now planned, Interior will complete the nine regional environmental statements currently underway, and will initiate one additional regional statement in FY 1978. These statements address mining plans on existing leases, associated actions such as railroad extensions or other rights-of-way, and where appropriate, preference right lease applications. In addition, the Department will prepare a programmatic environmental impact statement on the coal

program it proposes. It currently appears that immediate coal program needs can be accommodated within existing funds.

#### PROGRAM PLAN

##### Objectives

Specific objectives for the Four-Year Authorization period are:

- Operate the oil and gas leasing program on a pipeline basis (including processing of assignments) to facilitate timely development of these resources in response to growing National demand
- Process geothermal applications on a pipeline basis to facilitate such development and meet local energy needs in specific areas
- Administer existing prototype oil shale leases and utilize this experience to determine if additional leases should be issued.
- Facilitate increased production of coal from existing leases with follow-on reclamation activities in support of renewed reliance on this energy source.

##### Action Plan

The Bureau's plans for achieving the above objectives are discussed below.

##### Oil and Gas Leasing

Capability is provided in FY 1979 to accomplish the following work above the level accomplished in FY 1978; issue 1,000 leases, review 375 development plans, perform 1,500 compliance checks, issue 160 road permits, and process 4,000 backlogged assignment requests. FY 1980 - 1982 funds provide capability to respond to increased requirements for development plan review, lease issuance, and compliance as well as to assume increased workloads in NPR-A.

##### Coal

While current Departmental decisions and Court decisions make new leasing very unlikely through FY 1979, the issuance of additional leases (including preference right leases) could occur in FY 1980 - FY 1982. Some capability has therefore been provided in the authorization request for these years to accommodate the associated workload. In addition, the requirement for data being gathered through the Bureau's reclamation studies will grow as the number of mining plans submitted for approval grows; assurance of



reclamation capability is one of the prerequisites of mining plan approval. Thus the authorization request provides for continued reclamation studies.

BUDGET AUTHORITY  
\$ Millions

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>Four-Year Authorization Total</u>
Oil & Gas Leasing	\$ 9.0	\$ 9.9	\$11.1	\$12.1	\$13.1	\$46.2
Coal Leasing	19.1	19.1	22.5	23.5	25.5	90.6
Geothermal Leasing	2.5	2.5	2.5	2.5	2.5	10.0
Oil Shale Leasing	<u>.9</u>	<u>.9</u>	<u>.9</u>	<u>.9</u>	<u>.9</u>	<u>3.6</u>
Total	\$31.5	\$32.4	\$37.0	\$39.0	\$42.0	\$150.4

Positions

Oil & Gas Leasing	334	350	380	400	420
Coal Leasing	239	239	260	275	300
Geothermal Leasing	71	71	71	71	71
Oil Shale Leasing	<u>21</u>	<u>21</u>	<u>21</u>	<u>21</u>	<u>21</u>
Total	665	681	732	767	812

Accomplishments with Authorization

Leases Issued:

Oil & Gas	11,100	12,100	12,500	13,000	13,500
Geothermal	355	330	300	300	300

Revenues (\$ Millions)\*

Oil & Gas Filing Fees	\$24	\$24	\$24	\$24	\$24
Oil & Gas Leasing	351	405	440	480	525
Coal Royalties	13	19	29	44	64
Geothermal	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Total	\$390	\$450	\$495	\$550	\$615

\* Oil shale bonus payments in FY 1978 and FY 1979 assumed to be fully credited against development costs.



## FOUR YEAR AUTHORIZATION

### ENERGY OFFSHORE

#### GOALS

BLM carries out its responsibilities on the Outer Continental Shelf (OCS) in the context of the following goals:

- Orderly and timely development of oil and gas resources to meet national needs.
- Minimizing environmental impacts from development.
- Assuring a fair return to the public for resources sold.

#### BACKGROUND

In 1953, Congress enacted the Outer Continental Shelf Lands Act which charges the Department of Interior with administering the mineral development of the Outer Continental Shelf (OCS). In the case of oil and gas development and production, this involves selection of areas for leasing, supervision of geological and geophysical exploration, conduct of competitive bidding for the resources, and supervision of exploratory drilling and production activities on awarded leases. The conduct of these activities is primarily carried out by U.S. Geological Survey (GS) and the Bureau of Land Management (BLM). The Bureau has been delegated the leasing responsibility.

The total shelf and continental margin area of the OCS is estimated to be approximately 1.176 billion acres, of which about 1.147 billion acres is under Federal jurisdiction. Since passage of the OCS Lands Act, 45 lease sales have been held, primarily in the Gulf of Mexico. As of March 1977 there are 1,974 outstanding leases including over nine million acres. Petroleum production amounts to approximately 11 percent of total domestic production and natural gas production amounts to approximately 16 percent. All but 10 OCS leases issued to date have required payment to the Federal Government based on a royalty rate, most of these at 16-2/3 percent of the amount or value of production saved, removed, or sold from the lease. The other 10 were issued on a royalty bidding basis. Total Federal revenues from OCS resource development, including bonuses, rents, and royalties, amount to over \$22 billion.

Through 1975, OCS leasing activity was confined almost entirely to the Gulf of Mexico. The only exception was a small area leased in the Santa Barbara channel in southern California. Recognizing that the growing national demand for oil and gas warranted increased OCS development and expansion into new or "frontier" areas, the Department issued a four-year OCS proposed planning schedule in November 1974 which listed six sales per year through 1978, with sales in all frontier areas. The planning schedule was revised in mid-1975 and in January 1977. With the change in administration, the schedule was again revised; the current schedule was issued in August 1977. To date, sales have been held in three frontier areas - the Gulf of Alaska, Southern California, and the mid Atlantic. Under the August 1977 schedule, frontier sales are planned for the North



and South Atlantic, Northern California, and three Alaska areas. Additional sales are planned in the Atlantic areas, Gulf of Alaska and Cook Inlet. Implementation of the new schedule emphasizes cooperation with coastal States and communities in protecting coastal resources and resolving possible conflicts.

Efforts to coordinate with coastal State governments have increased substantially in the last few years. In the New Orleans office, the amount of time spent in coordinating actions with State governments and other agencies has quadrupled in the last three years. Formal and informal contact points throughout the leasing process have been identified, and specific uniform procedures are being followed.

A challenge during FY 1974 to the adequacy of the Department's environmental data base related to a scheduled sale in the Eastern Gulf of Mexico stimulated a major data collection and evaluation effort currently underway in BLM. While the Court ruled the data base for the proposed sale adequate, the Department initiated a program of benchmark or baseline and monitoring studies in frontier areas. These provide data for use in EIS's, tract selection, operating plan evaluations, future sale decisions, etc., and serve to preclude challenges to sales on the basis of inadequate data. To fill data gaps or provide specific information needed for decisionmaking, the Bureau also has a program of special studies. Together, these environmental studies programs account for almost 80% of the total BLM OCS leasing funds.

#### PROGRAM ACTIVITIES

The OCS Leasing Program has three major activities: (1) the leasing process; (2) general management of the OCS, including administration of existing leases, processing assignments, rights-of-way permits, coral permits, etc.; and (3) environmental studies. The Bureau has four OCS field offices which are responsible for processing lease sales in their geographic areas, including tract selection, preparation of environmental impact statements, public hearings, and pre and post sale evaluations. The offices are located in Anchorage, Alaska; New Orleans, Louisiana; Los Angeles, California; and New York City, New York. These offices are also responsible for processing lease assignments and pipeline rights-of-way requests and for maintaining contact with State governments to assure their involvement in various aspects of the leasing process.

The New Orleans office has the largest administrative workload and processed approximately 3,500 cases in FY 1977. This included 60 pipeline rights-of-way, 224 leases, and 3,200 assignments and mergers. Changes in regulations (for example, the ban on joint bidding) and assignment provisions which deal with future interest in holes have vastly increased the complexity of processing assignments. Time required for this work has increased from hours to days per assignment. In terms of overall program operation in FY 1977, New Orleans allocated manpower capability as follows: 35% to lease sales, including EIS preparation; 10% to program coordination; 10% to studies; 25% to general



management actions (i.e., casework and program direction); and 20% support (clerical, training, inventory).

Personnel supporting the OCS program are also located in Washington, D.C. These positions design and help procure the various contract studies, provide liaison with other Federal agencies and the scientific community, provide overall policy guidance, and participate in various aspects of the leasing procedure.

The leasing process followed by the Bureau includes the following sequential steps:

1. Resource reports - solicited from all Federal agencies and bureaus with appropriate expertise.
2. Call for nominations and comments - published in Federal Register. (Governors of affected states are notified at least 15 days prior to publication).
3. Tract selection - follows #2 by about five months and defines area to be covered by draft EIS. Affected States are invited to participate.
4. Draft EIS - follows tract selection by about eight months. States are contacted for input and review and comment on preliminary draft EIS.
5. Public hearings - follows publication of the draft EIS by about two months. All interested parties can comment on proposed sale.
6. Final EIS - follows public hearings by about three months. Considers formal comments received from each affected State. Provides data to help Secretary fully evaluate potential effects of the proposed sale.
7. Decision whether to hold a sale - follows at least 30 days after publication of final EIS. Notice of sale published in Federal Register with prior notice to Governors of affected States.
8. Pre-sale evaluation - prepared by USGS with BLM review.
9. Sale - at least 30 days after publication of the notice of sale.
10. Post-sale evaluation - analysis of bids to determine whether or not to accept or reject. Usually within two weeks of sale.

Based on leasing experience in the Gulf of Mexico, the average cost of holding a lease sale (including EIS preparation) is approximately \$630,000. About 29 manyears of effort are required per sale. Funding for leasing and general OCS management, including a share of the Bureau-wide general operating costs, is approximately \$11.1 million in FY 1978.



The baseline and monitoring studies and special studies comprise the other major program activity and are funded in 1978 at \$46.4 million. Baseline and monitoring studies are currently underway in Alaska and in six areas in the Lower 48 States. The studies are designed to establish a statistically valid benchmark for selected environmental parameters that might reflect the influence of OCS oil and gas development. Monitoring studies allow the Department to evaluate the impact of development on the environment and to make leasing and operating decisions which will provide for maintenance of the overall evaluational integrity of the area. Special studies address specific data needs such as hydrocarbon analysis, toxicity studies, socio-economic studies, faunal succession on rigs, bathymetric mapping, etc.

#### SITUATION

The major funding component of the OCS program - the baseline/monitoring studies and special studies effort - experienced serious shortfalls in FY 1977 which became even more critical in FY 1978. Congress reduced the requested studies funding in FY 1976 and FY 1977 based on slippage in the leasing schedule. However, no savings in the planned studies were realized; rather, inflationary costs related to ship time (a 17% increase in 1977), fuel, crew salaries, and scientific instrumentation effectively reduce capability each year. Given this very constrained funding situation, certain components of baseline/monitoring studies will have to be delayed or eliminated and only limited special study efforts (Alaska socio-economic, ADP model runs, and bathymetric maps) can be accommodated.

One aspect of OCS management which must receive attention early in the authorization period is development and implementation of policies on transportation systems. Examples of OCS transportation systems are pipeline routing, offshore terminals and tankering or a combination of these systems. Evaluation of leasing in the Gulf of Mexico resulted in pipelines randomly located throughout the Gulf. With initiation of leasing in frontier areas, actions must be taken at once to evaluate various alternatives for oil and gas transportation and to establish policies in cooperation with affected States governments and federal agencies.

Another factor that will significantly affect BLM's program is OCS legislation likely to be enacted during the 95th Congress. The OCS bill passed by the Senate calls for new regulations, use of alternative bidding systems in competitive sale, development of a five-year leasing program (including estimates of necessary appropriations and staffing), close coordination of leasing activities with affected States, and submission of annual reports to Congress. Implementation of such provisions may require added funding and manpower capability.

Finally, the four year authorization funding requests presented here do not include costs of major monitoring studies. Since development activities in a frontier area have not as yet been initiated, this aspect of the baseline/monitoring studies has not been fully developed or implemented. However, it is likely that by 1982 development in frontier



areas will be initiated, and funds for monitoring studies will be needed. Until the specific study requirements are known and the studies designed, it is not practical to estimate possible funding needs.

#### PROGRAM PLAN

##### Objectives

Specific objectives for the Four-Year Authorization period are:

- Facilitate timely development of oil and gas resources on the OCS by holding competitive lease sales annually as called for in the planning schedule
- Accelerate special studies to meet specific data needs for use in making decisions on future lease sales
- Conduct baseline/monitoring study program to assure availability of adequate data for use in EIS's, tract selection, operating plans, etc.
- Moderate impacts of oil and gas development by application of data obtained through baseline and monitoring and special studies.
- Facilitate transport of OCS oil and gas resources through a transportation system management program in cooperation with affected coastal states.

##### Action Plan

A four-year action plan for achieving the above objectives emphasizes study needs, with increases for special studies as well as capability to accommodate escalating costs of studies due in large part to inflation. The FY 1979 studies program reflects a shift in emphasis which will be continued through the authorization period. After the third year of intensive baseline studies in a particular area, baseline funding requirements are substantially reduced. By and during FY 1979, baseline studies in several frontier areas will reach this point. The funds which become available are being directed to special study needs. In FY 1979, approximately \$7.7 million will be redirected from baseline to special studies. This, however, does not totally accommodate special study requirements in FY 1979 or beyond, and increased capability is necessary.

The special studies provide information about critical problems and processes not addressed in either baseline or monitoring studies. They generally fulfill information needs regarding processes, dynamics, and causal relationships. The data are critical not only for making overall leasing decisions but also for tract selections, lease stipulations, and instructions. Special attention has been directed to avoiding duplication of scientific effort within BLM and with other Federal, state and private programs. Development of a cohesive policy on transportation systems and biological effects studies are two important thrusts of the special studies. As OCS leasing has proceeded into frontier areas, the economic, physical-biological, political, and public interest



aspects of pipeline siting and emplacement have become major concerns. The states' power to control pipeline emplacement in their own coastal waters dictates that BLM must work with them to moderate the impacts associated with pipeline transport. Biological effects studies will assess effects of contaminants on individual organisms and populations. This is a natural adjunct to the baseline/monitoring studies which are designed to reveal statistically significant changes in concentrations of contaminants in organisms, sediments and water.

Additional personnel to develop the OCS transportation system have been shown in FY 1979. Capability is also included to accommodate new administrative workloads in New York, Anchorage, and Los Angeles resulting from the issuance of leases in these areas as well as growth in administrative actions in New Orleans.

BUDGET AUTHORITY  
(\$ Millions)

	1978	1979	1980	1981	1982	Four-Year Authorization Total
OCS Leasing	\$57.5	\$67.7	\$70.0	\$75.0	\$80.0	\$292.7

Positions

OCS Leasing	232	274	274	280	285
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Accomplishments

Lease Sales	4	5	4	7	Unknown
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For transportation System:\*

Regional Mgmt. Study Plans	--	7	7	2	7
Site Specific Mgmt. Study Plans	--	2	4	5	2
Regional Transportation Mgmt. Plans	--	--	--	4	5

\* Each plan relates to a specific lease sale on the schedule.

Receipts  
(\$ Billions)

\$2.6	\$2.0	\$1.9	\$3.1	Unknown
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## FOUR YEAR AUTHORIZATION

### NONENERGY MINERALS ONSHORE

#### GOALS

The goals of this activity are:

- Orderly and timely development of the resources to meet National needs with adequate consideration given to other land and resource values.
- Minimizing environmental impacts from development.
- Assuring a fair return to the public for the resources sold.

#### BACKGROUND

The public onshore mineral estate is comprised of approximately 822 million acres, including public lands, acquired lands, and lands which have been patented with some or all minerals reserved to the United States. BLM's nonenergy minerals management program deals with minerals such as potassium, sodium, phosphate, and potash which are leased under the Mineral Leasing Act of 1920; minerals such as silver, bentonite, and mercury which are locateable under the General Mining Laws of 1872; and common variety materials which are made available through sales and free use permits to public agencies. The nonenergy minerals program also provides minerals support by making mineral exams for other resource management programs e.g., wilderness management, roadless areas, land exchanges, public roads and transportation system rights-of-way, etc.

The first Federal mining law was enacted in 1866 and revised in 1872; this law comprises the basic mining law today. It was enacted with the assumption that mining was the most important use of public land; and since little recognition was given to other possible uses, the law has enabled mining claims to override many other claims for public land. Until passage of the Federal Land Policy and Management Act in 1976, a claimant was not required to notify BLM of his claim; thus the Bureau does not know how many claims are filed against land it administers. Estimates go as high as six million claims. The claimant may obtain patent to his claim if he complies with surveying and other provisions of law. He then pays either \$2.50 or \$5.00 per acre for the land - depending upon the kind of deposit - irrespective of the value of the land's surface resources. In FY 1976, BLM closed the adjudication of 110 patent cases and had 450 cases awaiting adjudication at the end of the year; twenty-six mineral patents covering 4,000 acres were issued.



The Federal government offered minerals on its lands for lease from 1807 to 1846 but gave up the effort in 1846 because it proved impossible to administer. Special legislation was enacted for coal-bearing lands, while petroleum was developed under the 1872 mining law. General dissatisfaction with regard to petroleum resource disposal finally led to passage of the Mineral Leasing Act of 1920. With its many amendments, it is the basic law applicable to mineral leasing on public lands today. The Bureau's non-energy mineral leasing efforts revolve primarily around phosphate, potash, aluminum ores, and sodium; there are currently 419 leases for these minerals covering 473,000 acres of public lands. Growing demand for these commodities has led many to predict a "minerals crisis" similar to the energy crisis. Given the volume of mineral production from public lands, management of Federal nonenergy minerals significantly affects the overall minerals situation. For example, Federal lands in New Mexico currently provide over 80% of the total national production of potash, and a like percent of alunite (potassium aluminum sulfate) production comes from Federal lands in Utah. Approximately 33% of sodium and 55% of phosphate production occurs on public lands. (In addition, 70% of uranium production and 55% of bentonite production come from Federal land; these minerals are available under the Mining Laws). Receipts from existing nonenergy mineral leases amounted to \$14.5 million in FY 1976.

Disposal of mineral materials (including petrified wood, sand, gravel, aggregate, etc.) from public land is authorized by the Materials Act of July 31, 1947, as amended. Mineral materials may be sold upon request of any individual, company, etc. or by Bureau initiative to a qualified purchaser. Mineral materials needed by qualified Government agencies for public projects may be supplied under free use permits insofar as this is compatible with land use planning and other resource values. Nonprofit organizations may also obtain mineral materials within certain dollar limits through free use permits.

The material sales program is oriented to meeting local demand. While it is BLM policy to encourage development of mineral material resources, assuming adequate measures are taken to protect, minimize, or correct damage to the environment, the Bureau at the same time considers availability of deposits on other Federal lands and private sources. Material sales can be either competitive or noncompetitive. They are competitive when the value of materials exceeds certain limits and competitive interest is evident. They are noncompetitive (negotiated) if the quantity is too small to justify advertising; the material is for the buyer's own use and the volume is small; no evidence of competitive interest can be determined; the material will be used for development of Federal land under mineral lease; or the contract is for material to be used on a public works improvement program and public exigency does not allow delay for advertising. The total value of negotiated sales under these various conditions is specified. Materials to be used for highways under the Federal Highway Act are provided by right-of-way or free use permit as requested by the State Highway Department. There is no limit on value of a free use permit.



Since FY 1974, the number of material sales in the Lower 48 States has gone down slightly; however, the value of the materials has doubled, and when soil additives are included, the value quadruples. For free use permits, the number issued has doubled since FY 1974 and the value of the materials has increased 270%. During this period in Alaska, both sales and free use permits have increased dramatically in response to needs for the Trans-Alaska Pipeline. While this demand no longer exists, energy related demand in other states is expected to continue increasing. Alaska demand may be resumed if a gas pipeline is built.

#### PROGRAM ACTIVITIES

The nonenergy minerals program operations include the following major activities and associated funding for FY 1978.

<u>Mining Law Administration</u>	<u>\$2,479,000</u>
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This activity provides for processing mineral patent applications with associated field investigations and reports which result in mineral character determinations and mining claim validity determinations. The latter are prerequisites to contest and appeal actions. Effort will be directed to processing approximately 140 patent applications. This involves three principal actions - adjudication, mineral investigation, and patent issuance or contest processings; it requires an average of 4 months of effort per application.

<u>Material Sales and Free Use Permits</u>	<u>\$1,918,000</u>
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Demand for mineral materials in response to energy development and highway construction is expected to continue at the current level. To accommodate this demand, approximately 1,200 material appraisals and sales contracts will be completed and 450 free use permits will be issued. The Bureau establishes community pits and common use areas to provide a convenient source of saleable minerals to meet a continuing local need, minimize administrative work in processing sales, and concentrate use in limited areas. To establish a material site, the area must be evaluated and an environmental analysis record prepared. The site must be appraised to determine the quantity of materials present, their value, and the appropriate volume price to be charged. Provision for reclamation is made by requiring a charge in addition to the purchase price of the material. Stipulations which cover such aspects as minimum safety standards, restoration requirements, hours of operation, etc. to be included in the sales contracts must be developed. Compliance checks are needed to assure that stipulations are being met and appropriate payments are being collected. In situations where materials are being taken in trespass, surveys must be made to determine the volume extracted, and action taken to recover losses and damages.



Mineral Leasing\$2,185,000

Effort will be directed to administering the 500 existing leases and permits on public lands, and to issuing approximately 57 leases and 73 prospecting permits for phosphate, sodium, sulphur, and potash. A moratorium on processing potash and phosphate applications pending completion of environmental reports resulted in a large backlog of these applications. Emphasis in FY 1978 will be placed on reducing this backlog.

General Resource Program Support

(funds included above)

In addition to the specific work related to minerals programs discussed above, minerals expertise is also required in support of other resource management programs. Minerals input is a prerequisite to land transfer actions, with over 5,000 such cases being processed annually in the Lower 48 States. Investments in structures in range, wildlife, and watershed programs are not made without a determination as to the existence of mining claims. Timber sales and major building and recreation construction projects also require support to assure that the associated lands are free of mining claims. Also, prior to any proposed land withdrawal, the affected area must be evaluated to determine its potential for mineral development. Finally, minerals expertise is utilized in preparing land use plans and environmental reports. Approximately 240 mineral character determinations (each requiring 7 days of effort) and 235 validity determinations (each requiring 3 months of effort) will be accomplished.

SITUATION

As the demands of the Bureau's energy programs have grown, less manpower has been available for nonenergy minerals activities. Existing minerals capability has often been redirected from nonenergy to energy programs; and of the new positions allocated to BLM minerals programs from 1970 to 1976, only 3% went to nonenergy minerals programs. (61% went to energy onshore and 36% went to energy offshore). At the same time, the workload in non-energy minerals is increasing significantly: more patent applications are being filed and await processing; demand for minerals such as phosphate, potash, sodium, and aluminum ore is rising with a resultant increase in lease and permit applications; additional effort is required for validity determinations and mineral character determinations in support of realty casework activities. In addition, a new program to provide surface management on mining claims will be initiated in FY 1978.

The rate of filing mineral patent applications is continuing to increase from approximately 70 per year in 1972-74 to an estimated 85 per year by 1978 with a resulting increase in the patent processing backlog. Since BLM is required under provisions of the Mining Law of 1872 to process these applications, such a backlog is unacceptable in terms of fulfilling our management and mandatory public service responsibilities. With funding and manpower increases provided in FY 1977 and FY 1978, this backlog should be substantially reduced by 1983. Emphasis is being placed on expeditiously processing 21 patent applications involving oil shale lands in Colorado in response to direction from the Colorado District Court. The related workload is substantial since the applications involve 396 claims and contests are anticipated on all applications.



Since the passage of the General Mining Laws of 1872, there have been no regulations adopted governing the use and misuse of the mining laws on land administered by BLM. Passage of the Federal Land Policy and Management Act (Section 302(b)) which requires that the Secretary take any action necessary to prevent unnecessary or undue degradation of the public lands served as the stimulus in bringing the Department to prepare surface management regulations. The purpose of the regulations is to set procedures to minimize adverse environmental impacts on surface resources of public lands from operations authorized by the U.S. mining laws. Regulations were published as proposed rulemaking on December 6, 1976, with a 30 day comment period. Due to intense public interest, the comment period was extended to April 5, 1977. Comments from more than 5,000 persons were received and analyzed and public meetings were held in nine states. With consideration given to this input, the regulations will again be published as proposed rulemaking. They should be published as final and become effective early in 1978. A major component of the funding requirements through FY 1982 relates to implementation of these regulations. No added funding was provided in FY 1978 for this purpose, and a supplemental request may therefore be necessary.

During the four-year authorization period, revision of the General Mining Laws is likely. Both the Administration and Congress have indicated strong interest in passing legislation to modernize the 1872 law, and significant changes in the Bureau's program are certain to be required. Funding and manpower impact cannot be assessed at this time.

No major program changes are anticipated for the mineral leasing and material sales programs. A slight increase in workload in the nonenergy leasing area is accommodated in the authorization request as demand for these mineral commodities continues to grow.

#### PROGRAM PLAN

##### Objectives

- Significantly reduce the growing mineral patent application backlog and thus make such minerals as gold, bentonite, copper, and others available for development.
- Complete processing of 21 oil shale patent applications in Colorado as directed by the District Court.
- Provide required minerals support to other resource management programs e.g., withdrawals, wilderness areas, roadless areas, etc.



- Eliminate current backlogs in processing applications for phosphate and potash permits/leases to make these minerals available in response to agricultural and industrial needs.
- Provide building stone, aggregate, and other mineral materials in a timely manner to facilitate energy-related construction and meet local governmental needs.
- Minimize adverse environmental impacts on surface resources of public lands from operations authorized by mining laws through application of appropriate regulations.

#### Action Plan

Accomplishment of the above objective for material sales can be done with existing capability. Processing mineral patents, issuing and administering mineral leases, and providing mineral support for other programs are expected to require added manpower and funds as the number of actions increase.

Thus, to accommodate additional leases, environmental reports, development plan reviews, compliance checks, assignments, patent applications, and general support functions, an annual funding increase of seven percent (\$400,000) is being requested.

Meeting the objective for surface management of mining claims will require major funding increases during the authorization period. Principal work-load components include processing notices of exploration and plans of operation, performing compliance checks, and reducing violations. Regulations specify time frames for BLM response; plans must be processed within 30 days of receipt or 90 days if accorded a 60 day extension. Failure by BLM to respond within these time frames is considered approval.

Processing a plan of operation includes preparation of a cultural/ archeological inventory of the area, preparation of an environmental analysis report and technical exam to determine specific protection stipulations, and general office work. On the average, it is estimated that a plan of operation would require 10 days to process, including one day of followup compliance during the year.

The Bureau currently does not have data on the number of existing mining claims or more relevantly the number of claims involving significant surface disturbance. However, field office estimates indicate potential receipt of over 5,000 plans of operation in FY 1979. Since the Bureau cannot in a single year recruit and incorporate into the Bureau the total positions required to administer the program, capability to process approximately 1,050 plans is requested in FY 1979. Additional increases are provided for in FY 1980 and FY 1981 to reach total required capability.



BUDGET AUTHORITY  
(\$ Millions)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>Four Year Authorization Total</u>
Mining Law Admin.	\$2.5	\$4.1	\$6.8	\$10.7	\$8.6	\$30.2
Material Sales	1.9	1.9	1.9	1.9	1.9	7.6
Mineral Leasing	2.2	2.2	2.3	2.4	2.5	9.4
Total	6.6	8.2	11.0	15.0	13.0	47.2

POSITIONS

Mining Law Admin.	71	117	207	337	275
Material Sales	63	63	63	63	63
Mineral Leasing	72	72	76	80	84
Total	206	252	346	480	422

ACCOMPLISHMENTS WITH AUTHORIZATION

Patent Applic. Processed	140	140	145	150	160
New & Modified Plans of Operation Processed	-	1,050	2,400	4,300	2,800
Compliance checks on Plans of Operation	-	1,050	3,450	7,750	10,550
Notice of Exploration	-	-	8,000	16,000	8,500
Material Sales Contracts Free Use Permits	1,600	1,600	1,600	1,600	1,600
Mineral Leases Issued	57	30	35	40	45

REVENUES (\$ MILLIONS)

\$24      \$26      \$28      \$30      \$32



LANDS & REALTY  
MANAGEMENT



## FOUR YEAR AUTHORIZATION

### LANDS AND REALTY MANAGEMENT

#### GOAL

The goal of the Bureau of Land Management's Lands and Realty program is to maintain the public land records, to issue public land status and information, and where consistent with land use planning, make public lands available through lease, permit, sale, or exchange to the private sector and to other governmental agencies.

#### BACKGROUND

After the Union was formed in 1789, the original 13 States ceded their "western" lands to the Federal government to be used as a revenue source. In the course of history, through purchase, seizure, or annexation, the nation realized its present boundaries. By 1850, vast amounts of territory (above 80% of the total U.S. land area) became property of the Federal government through these means.

Much of this land went into private hands through cash sales. Other large amounts of land were given at little or no cost, first as a form of payment for military service and later as grants to States, individuals, and businesses to encourage settlement, farming, development of railroads, education, and mineral development. The Homestead Act of 1862, the General Mining Law of 1872, the Desert Land Entry Act of 1877, and the Land Grant Act of 1887 were a few of the laws that authorized the transfer of this western land to individuals, corporations, and States.

At first, the Federal government exercised little control over the distribution of lands and resources and exploitation was unbridled. Disposal, of course, was primary. Large scale disposals, however, slowed in the 20th century, particularly after the mid-1930's. Of the land remaining in Federal ownership, a portion was eventually reserved for special purposes - national parks, national forests, military reservations, national wildlife refuges, and Indian reservations. The lands administered by BLM are largely a patchwork of intermingled Federal and private holdings. This situation was created by a former permissive land disposal policy that continues to provide administrative problems even today.

Until 1934, little attempt was made to manage the public land. Fires were allowed to burn themselves out; little or no restraint was applied to trespassers; public land was grazed excessively with absolutely no management.



In 1934, the neglected and overgrazed lands were the subject of legislation with the passage of the Taylor Grazing Act. The Act gave the basic authority for governing the uses, management and disposal of public lands. It required the General Land Office (which was merged in 1946 with the Grazing Service to become the Bureau of Land Management) to classify public domain lands (not just rangeland) suitable for disposal and ended the era of uncontrolled settlement. The BLM began exercising resource management functions that had not been used before, namely classification, planning, and management of the mineral estate including the Outer Continental Shelf (OCS) for oil and gas leasing.

The Bureau continued to exercise the "Land Office" function by maintaining lands records and keeping land status. BLM continues to have the responsibility for the land examination, sale, exchange, lease and disposal of all BLM administered land, as well as land classification, withdrawals, leases, permits, and the granting of rights-of-way.

#### PROGRAM ACTIVITIES

BLM Lands and Realty program activities are divided into three categories energy related realty, nonenergy related realty, and withdrawal processing and review. All are primarily directed and structured toward land casework processing. Activities and FY 1978 expenditures are:

<u>Energy Related Realty</u>	\$9,736,000
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This activity includes the realty administrative actions necessary to process applications for energy related rights-of-way grants and some other projects such as small withdrawals and exchanges.

Processing actions include preliminary investigations, which consider alternate site analysis, preparation of environmental reports and statements, appraisal, permit issuance, construction supervision, and compliance monitoring.

Note: All energy related rights-of-way applications (projects) for which the costs of processing are reimbursed by the applicant, are funded in the "Service Charges, Deposits, and Forfeitures" appropriation, which was established beginning in FY 1978. Among the 100 projects now funded in this appropriation are the Trans Alaska Pipeline (construction supervision and compliance monitoring), ALCAN Natural Gas Pipeline (R/W issuance) and Northern Pipeline (preliminary investigations and ES preparation).

The projects which are funded in the Management of Lands and Resources appropriation - Lands and Realty activity - are those for which cost recovery provisions do not apply. Projects fall in this category in the following instances.

- 1) When it is estimated that the cost to process a R/W grant application is less than \$10,000, no cost recovery is sought from the applicant; only a nonreturnable fee (similar to a filing fee) is charged.



- 2) BLM input to another Federal agency's ES is not cost reimbursable.
- 3) Processing R/W applications for municipalities or local governments is not cost reimbursable.

In addition, costs of "management overhead" are by virtue of Section 304 of FLPMA, not subject to cost recovery. All management overhead costs incurred in processing project applications funded in the Service Charges appropriation are funded here.

<u>Nonenergy Related Realty</u>	\$14,109,000
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This activity includes costs of processing all realty casework except withdrawals and those cases defined above as energy related. It also includes the cost of maintaining public land records, which number some 9 million documents - patents, land status records, survey plats and field survey notes. Costs to respond annually to 75,000 public inquiries for information and land status by letter and by phone are also included.

The processing actions include:

- In FY 1978, pursuant to implementing the Alaska Native Claims Settlement Act (ANCSA), 260 Native allotments, 120 State Selections, and 650 Native, village, regional and miscellaneous selections.
- Land Tenure adjustments including exchanges, sales, and permits. In FY 1978, 2,550 of these actions will be completed.
- Land use authorizations which include leases and permits (other than R/W permits); in FY 1978, 1,500 of these actions are expected to be completed.
- Compliance actions (monitoring construction and project sites to see that permit stipulations are being met) number up to 2,170 in FY 1978.
- To meet a FLPMA mandated requirement that all outstanding cases of unintentional trespasses be completed by 1981, 107 of these cases will be disposed of in FY 1978.
- Some 200,000 mining claims are expected to be recorded in FY 1978. The big bulk of recordation (up to 1,500,000 claims) is expected in FY 1979.

<u>Withdrawal Processing and Review</u>	\$1,076,000
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Processing of withdrawal applications and review of existing withdrawals continued in FY 1978. Because of the timeframe set by FLPMA for process and review, an inventory will be conducted in FY 1978 to determine the number of existing withdrawals and the magnitude of the workload.

TOTAL	<u>\$24,921,000</u>
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## SITUATION

When the General Land Office was created, the guiding principle behind land policy was disposal. From 1812 to 1976, disposal of the Federal lands operated under an accumulation of some 3,000 laws passed over the years - some conflicting, some applying to limited geographic areas, and some only to isolated issues. Conflicts led to frequent litigation resulting in many time consuming efforts to resolve the issues.

Lacking also was a clear statement of the philosophy about the national public lands; the philosophy varied from administration to administration.

The passage of the Federal Land Policy and Management Act (FLPMA) on October 21, 1976 gave the Bureau a clear statement of policy and directs the thrust of land policy from disposal to retention and multiple use management.

FLPMA also establishes certain new requirements and timeframes to complete specific actions. Unintentional trespass cases are to be disposed of by October 1981, withdrawal processing and review is to be completed in 15 years and mining claims are to be recorded with BLM. Repeal of certain public land laws has disposed of some types of casework. These changes and redirections, however, have not enabled the Bureau to keep pace with the ever increasing use demands for the public lands. As a result, lands casework backlog keeps building.

The following indicates the growth of case backlog over the past several years:

### LANDS CASEWORK IN BACKLOG AT END OF FISCAL YEAR

	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>
Lower 48	6,075	7,012	7,030	8,084	8,096	9,880
Alaska	<u>6,169</u>	<u>11,636</u>	<u>a/</u>	<u>11,259</u>	<u>11,655</u>	<u>12,636</u>
Total	12,244	18,648	18,289	19,739	20,732	25,297

a/ Increases due to over 5,000 Alaska native allotment cases transferred from BIA to BLM in FY 1972.



The following table indicates, for the Lower 48 States only, the age of approximately 75% of all types of cases in backlog as of June 30, 1977.

CASE TYPE

	Desert Land Exchanges	Color- of- Entries	Mining Title	State Patents	R&PP	R/W <sup>a/</sup>	Total
Less than 1 year	40	143	19	31	1	68	728 1,030
1 to 2 years	38	268	16	39	-	57	192 610
2 to 3 years	36	210	13	70	-	43	119 491
3 to 4 years	26	275	18	67	7	38	73 504
4 to 5 years	18	177	8	32	26	26	59 346
5 to 10 years	83	177	34	81	20	74	74 543
more than 10 years	12	142	20	66	224 <sup>b/</sup>	33	14 511
Total	253	1,392	128	386	278	339	1,259 4,035

a/ Rights-of-way including those authorized under Title I, Sec. 28 Mineral Leasing Act of 1920 as amended.

b/ Of which 222 are in Utah.

PROGRAM PLAN

Objectives

Specific objectives for the 4 year authorization period are:

Energy-Related Realty

Process all energy related rights-of-way applications, which do not have cost recovery requirements.

Nonenergy-Related Realty

- Implement the land and realty sections of FLPMA by meeting the established deadlines.

- ° Complete action on all pending unintentional trespass cases by 10/20/81.
- Record all mining claims submitted to BLM for filing.



- Continue to implement ANCSA and the Alaska Statehood Act by:
  - ° Complete processing of ANCSA related cases by 1986.
  - ° Complete processing State Selections by 1996.
- Complete processing of all other types of pending land use applications.
- Maintain the public land records and respond to all public inquiries and applications.

#### Withdrawal Processing and Review

- Complete processing all pending (as of 10/21/76) and all new (received since 10/21/76) withdrawal and revocation applications in 15 years (by 10/21/1991).
- Review all existing withdrawals by 10/21/1991.

#### Action Plan

To carry out the objectives above, the plan will include:

##### Energy Related Realty

- Process 1,600 energy-related right-of-way applications with non cost recoverable features.
- Process (by providing the "management overhead" input) 100 energy related right-of-way applications funded under the Service Charges, Deposits, and Forfeitures appropriation.

##### Nonenergy Related Realty

- Implementing FLPMA
  - ° Dispose of 423 unintentional trespass cases by 10/20/81 by either rejecting them for cause or sale by the established procedure.
  - ° Record an estimated 1,500,000 mining claims submitted to BLM for filing.
- Implementing ANCSA
  - ° Complete processing of 1,040 native allotments.
  - ° Complete processing of 2,600 native, village, regional, and miscellaneous selections.
  - ° Complete processing of 480 State Selections.



- Complete processing of approximately 8,000 cases annually. The case types include exchanges, sales, recreation and public purposes permits, desert land entries, non-mineral leases and permits, and nonenergy related rights-of-way.
- Maintain annually through receipt, recording, processing, and storage of some 9 million public land records.
- Respond to approximately 75,000 inquiries annually for information and States on Federal land holdings.

Withdrawal Processing and Review

- Complete processing of 557 pending and process 782 new withdrawal and revocation applications.
- Complete 577 withdrawal reviews.

	BUDGET AUTHORITY \$ MILLIONS					4-Year Authorization Total
	1978	1979	1980	1981	1982	
Management of Lands & Resources	24.9	28.0	31.8	33.7	35.4	128.9
Service Charges, Deposits and Forfeitures <sup>1/</sup>	10.4	32.8	30.8	30.8	27.8	122.2
Total Lands & Realty	35.3	60.8	62.6	64.5	63.2	251.1

POSITIONS

Management of Lands & Resources	868	1,008	1,171	1,238	1,298
Service Charges, Deposits and Forfeitures <sup>1/</sup>	174	420	420	420	420
Total Lands & Realty	1,042	1,428	1,591	1,658	1,718

<sup>1/</sup> Service Charges, Deposits and Forfeitures appropriation not subject to authorization requirements; data provided to show total program.



The following spreads only the Management of Lands & Record appropriation by activity:

<u>Activities</u>	BUDGET AUTHORITY \$ MILLIONS					4-Year Authorization Total
	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	
Energy Related Realty Actions	\$ 9.7	\$ 9.7	\$10.7	\$11.0	\$11.5	\$ 42.9
Non-Energy Related Realty Actions	14.1	16.1	17.9	18.5	19.7	72.2
Withdrawal Processing & Review	<u>1.1</u>	<u>2.2</u>	<u>3.2</u>	<u>4.2</u>	<u>4.2</u>	<u>13.8</u>
<b>Total</b>	<b>\$24.9</b>	<b>\$28.0</b>	<b>\$31.8</b>	<b>\$33.7</b>	<b>\$35.4</b>	<b>\$128.9</b>
<u>POSITIONS</u>						
Energy Related Realty Actions	371	371	406	410	425	
Non-Energy Related Realty Actions	476	572	665	693	738	
Withdrawal Processing & Review	<u>20</u>	<u>65</u>	<u>100</u>	<u>135</u>	<u>135</u>	
<b>Total</b>	<b>867</b>	<b>1,008</b>	<b>1,171</b>	<b>1,238</b>	<b>1,298</b>	
<u>ACCOMPLISHMENTS WITH AUTHORIZATION</u>						
	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	
Public Inquiries (000's)	75	75	76	77	78	
Public records maintained (Millions)	9	9	9	9	9	
Mining claims recorded (000's)	200	1,250	20	20	20	
R/W processed (No.) (resulting from authority of Title I - P.L. 93-153, involving two or more agencies, est. only)	1,700	2,000	2,400	2,500	2,600	
		(200)	(500)	(500)	(500)	
ANCSA and State Selections and allotments processed (No.)	1,030	1,100	1,100	1,100	1,100	
Land Tenure Adjustments (No.) (exchanges, sales, grants, etc.)	2,550	2,850	3,250	3,300	3,400	
Land Use Authorizations (No.) (Leases and permits other than R/W)	1,500	1,600	1,700	1,800	1,900	
Compliance Actions (No.)	2,170	2,170	2,190	6,820	11,520	
Withdrawal and revocation Applications processed (No.)	85	193	336	440	370	
Withdrawals reviewed (No.)	5	107	116	151	203	







## FOUR YEAR AUTHORIZATION

### FOREST MANAGEMENT

#### GOALS

The Bureau of Land Management's forestry program includes protection, management and development of 2.1 million acres of commercial forest land and 22 million acres of woodland in the western states.

Goals for the program are:

- protect forest lands from insects, disease and trespass.
- provide forest resource information to meet established schedules for completion of environmental statements for timber and related resources, and for long range planning.
- promptly harvest timber which has been damaged as a result of storm, fire, insects or disease.
- sell the sustained yield allowable harvest and implement intensive practices which will maintain or increase the sustained yield by increasing the net growth and yield of forest stands.
- secure prompt regeneration of forest stands on cut-over or burned-over areas.
- provide forest management needed on intermingled public forest lands in western Oregon in conjunction with the O&C Grant Land Fund.

#### BACKGROUND

The current forest management program on public lands has evolved from temporary legislation during the 1940's to provide timber for defense needs. However, there was little management on public timber lands until after World War II because the General Land Office had limited funds and no legal authority to sell live healthy timber. Although earlier acts contained various authorities for public land timber management, little activity occurred until the Grazing Service, the Oregon and California Grant Lands Office, and the General Land Office were consolidated into the Bureau of Land Management in 1946. In 1947, the Material Sales Act authorized for the first time the sale of live standing timber from the public lands.

Even with this authority, lack of funds prevented any management program except for limited sales and trespass work. The BLM budget for 1952 states that 450 applications for timber sales were received and trespass was considered to be a serious problem.



From 1950 to 1970, the forestry program expanded. It was largely sales oriented with nearly all of the funding provided to sell timber volumes averaging about 100 million board feet annually. Management funds for protecting, developing and maintaining the majority of the public land forests were very limited.

A new inventory was initiated in 1972 because of the apparent unreliability of previous inventory data and because of a need to develop a multiple use, sustained yield forestry program in conjunction with the Bureau's new land use planning system.

This inventory and the planning effort have resulted in an indicated allowable harvest level for public forest lands which is fully responsive to the direction and authorities contained in the Federal Land Policy and Management Act of 1976, i.e. to manage public lands for multiple use and sustained yield of the various resources, including forest products.

The United States is not self sufficient in wood production and imports 11% of the total domestic consumption. Compared to 1971, by 1990 the demand for new housing units is expected to increase from 1.5 million to 3 million units.

Based on this projected shortage and an increase in demand, the Bureau's forestry program seeks to produce a high level of raw material from forest lands, subject to the principles of multiple use, sustained yield and environmental protection.

Current annual timber production from these lands is approximately 65 million board feet; 30,000 permits are issued for forest products other than timber. These include fuelwood, posts and poles, Christmas trees, pinon nuts and other minor products. Potential timber production for these lands is estimated at 130 million board feet annually.

Intensive forest management practices such as precommercial thinning, tree planting, and salvage of dead timber, are designed to further develop and maintain the productive capacity of forested sites and to increase sustained yield production.

Legislation which authorizes or guides the attainment of the forestry goals includes:

- Alaska Sales Act of May 14, 1898
- Timber Protection Act of September 21, 1922
- Alaska Timber Export Act of April 12, 1926
- Taylor Grazing Act of June 28, 1934
- O&C Act of August 28, 1937
- Material Sales Act of July 31, 1947
- Public Land Administration Act of July 14, 1960
- Multiple Use Act of July 23, 1955
- National Environmental Policy Act of 1969
- Federal Land Policy and Management Act of October 21, 1976



## PROGRAM ACTIVITIES

BLM's activities have been oriented toward the broad program goals. These activities and FY 1978 expenditures are:

Timber Sales \$3,514,000

This activity includes preparing long-range plans for timber harvest and developing the sale location, volume estimates and appraised price for each tract of timber. Sales are planned for areas containing large amounts of over-mature timber or timber threatened or damaged by insects, disease, fire or other causes. Sales are also made to meet local demands for timber. Advance planning for sales includes consideration for multiple use, sustained yield and environmental protection. Such sales require that timber be removed during a specified period of time (usually 2 years) and also require the purchaser to construct roads, remove unwanted wood material, prevent erosion, rehabilitate the site and provide other environmental protection measures on the contract area. Contract administration is a part of this activity. The volume of sales sold in FY 1978 is estimated to be 75 million board feet.

Forest Management (W. Oregon) \$1,310,000

This activity provides the minimum funds necessary to carry out forest management practices on the intermingled BLM administered public lands in Western Oregon. They are combined with the O&C Grant Land Funds to provide the total forest management capability for all BLM lands in the Western Oregon region.

Inventory and Activity Planning \$1,411,000

This activity includes completion of the extensive inventory and additional intensive inventories such as the timber production capability classification (TPCC) which will be used to develop long range timber management plans. These inventories will be the basis for the plans needed to implement the full sustained yield harvest level. It also includes preparation of annual timber sale plans and site specific plans for forest development practices and transportation systems. Thirty plans will be prepared in FY 1978. Approximately 175,000 acres of forest land will be inventoried in FY 1978 to help develop these plans.

Other Forest Product Sales and Management \$1,209,000

Includes preparing specific areas for minor and other forest product sales and selling by advertising or by negotiation. Also includes making small sales for rights-of-way, oil well sites, recreation development, wildlife habitat, and forest and range improvement. This activity also includes administration of sales and trespass investigations. In FY 1978, 30,000 sales and permits will be issued for forest products other than timber.



Intensive Management Practices\$1,332,000

This activity includes all of the forest development programs including tree planting, tree seeding, site improvement, pre-commercial thinning and other practices designed to return forest lands to productivity or to increase quality and growth rates on specific sites. The activity is labor intensive and most is accomplished by private contractors who bid for specific jobs. A considerable amount of forest work is also accomplished at various times by non-profit associations such as the Boy Scouts and Girl Scouts of America, schools and civic associations, Youth Conservation Corps and by the Environmental Education Program. Other support activities include road planning and easement acquisition needed to provide roads for the forest management activity. Forest development practices will be conducted on 2,000 acres in FY 1978.

Total \$8,776,000SITUATION

Current inventory statistics indicate there are 2.1 million acres of commercial forest land with standing timber of over 11 billion board feet and an annual producing capacity of 178 million board feet in 11 western states excluding Alaska and the O&C Lands.

## Commercial Forest Land

	(000) Acres	Volume MMBF	Producing Capacity MMBF	Woodland Acres (000)
Arizona	25	19	Ø	915
California	250	3,030	51	1,550
Colorado	422	1,371	42	2,652
Idaho	411	3,961	38	96
Montana	530	1,045	18	306
Nevada	1	1	Ø	6,849
New Mexico	39	42	Ø	2,173
E. Oregon & Wash.	220	944	17	803
Utah	24	71	Ø	5,723
Wyoming	210	968	12	579
<b>Total</b>	<b><u>2,132</u></b>	<b><u>11,452 MMBF</u></b>	<b><u>178 MMBF</u></b>	<b><u>21,646</u></b>

Based on an analysis of multiple use values, some of these commercial forest lands will be restricted from intensive forest management. These restrictions will reduce the acres of commercial forest land available for production from 2.1 million acres to 1.5 million acres and the potential yield from 178 million to 130 million board feet annually. The reductions are expected to be a positive benefit to other resources such as water quality, wildlife habitat and recreation and will help protect steep and fragile sites. The restriction and sustained yield calculation for commercial forest land are shown below.

No Cutting	Limited Cutting	Sustained Yield MMBF
---------------	--------------------	-------------------------

Commercial Forest Lands	29%	22%	130
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Based on this inventory data and the subsequent sustained yield calculations, the Bureau prepared an Environmental Impact Statement to analyze impacts of implementing a 10 year timber management program on forested public lands in the western states. Further requirements for statements and analyses are discussed in the Program Plan section of this report.

The estimated 22 million acres of woodland must also be protected from insects, disease, and trespass in order to maintain site productivity and provide primary benefits such as wildlife habitat, water quality and recreation use. An estimated 20,000 - 30,000 permits are made annually on these lands for forest products other than timber. Removal of dead and diseased trees by sales is an opportunity to improve most woodland sites and to meet multiple use objectives.

### PROGRAM PLAN

#### Objectives

Specific objectives for the 4 year authorization period are:

- implement the sustained yield harvest level on productive forest lands. Increase the current harvest level to reach 130 million board feet by FY 1981.
- meet demands for sales of minor and other forest products estimated at 30,000 - 40,000 sales and permits annually.
- increase investments for intensive forest practices and in roads, access and cadastral survey to support the full sustained yield level.
- maintain and enhance 22 million acres of forest and woodland areas for production of wood products, water, wildlife habitat and recreation values.

#### Action Plan

BLM's plan for carrying out sustained yield management on forest and woodland areas as authorized in the Federal Land Policy and Management Act includes:

- meet demands for forest products other than timber.
- complete analysis of extensive inventory data and conduct site specific inventories.
- meet environmental analysis and environmental impact statement schedules.
- develop intensive management and support requirements.
- accelerate the annual timber sale program to reach the indicated allowable harvest.



### Other Forest Product Sales

In FY 1978, approximately 30,000 sales and permits will be made for forest products other than timber. This local demand presents an opportunity to improve woodland areas by removing dead and diseased trees which would otherwise be lost. Without such sales, woodcutters would remove trees from areas which should be protected. In addition, disease and insects endangering these areas would go undetected, causing damage to other resources and adjacent forest areas both private and Federal.

### Inventory and Analysis

Extensive inventories have been completed for all of the following sustained yield units.

<u>State</u>	<u>Sustained Yield Units</u>
California	3
Colorado	3
Idaho	3
Montana	3
New Mexico	1
E. Oregon	2
Wyoming	2
Total	17

To implement the full sustained yield harvest level for each of these units, a long range (10 year) plan is needed to quantify some or all of these outputs:

<u>Practice</u>	<u>Outputs</u>
Harvesting	acres and volume, by cutting method
Reforestation	number of trees, species, zone, acres, etc.
Thinning	acres of pre-commercial, commercial
Transportation	miles of road, number of easements
Land Survey	miles of line, corners established

Additional intensive inventories will be needed for specific sites and based on this data a sustained yield plan will be prepared for 17 sustained yield units.

### Environmental Report Requirements

The National Environmental Policy Act requires that all Federal action having an impact on the environment be analyzed and if the impact is significant, an Environmental Impact Statement (EIS) be prepared. Based on a Federal court review of BLM practices, the following schedule has been approved for various sustained yield units:



Statement ScheduleDate

Coeur d'Alene, Idaho	6/30/1979
Ukiah, California	9/30/1980

Analysis Schedule

Missoula, Montana	9/30/1976
Dillon, Montana	9/30/1977
Idaho	9/30/1978
California	9/30/1980

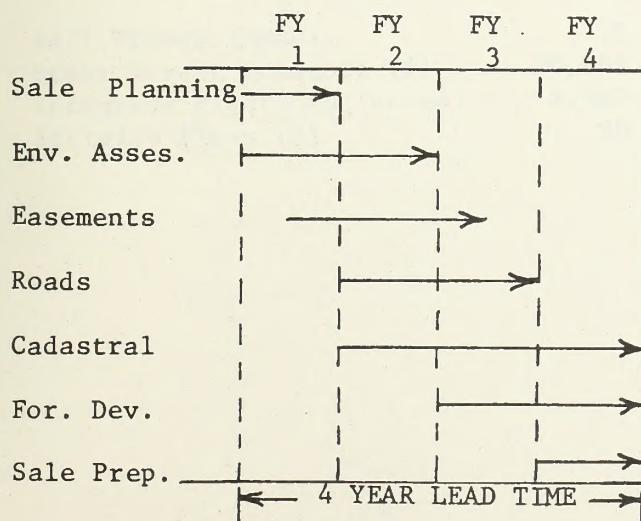
Harvest of approximately 13 million board feet of the proposed 130 million is dependent upon satisfactory completion of an environmental impact statement as specified in court approved agreement between National Resource Defense Council and the Bureau of Land Management. Other EIS/EAR documents are being prepared but do not presently restrict harvest levels below those shown.

Intensive Management Support

The projected timber harvest levels are based on an allowable cut calculation which assumes that certain practices will be carried out. These practices include reforestation, thinning, access acquisition, road construction, etc. If these practices are not conducted, the projected harvest level cannot be sustained. Practices proposed under this program include:

<u>Practice</u>	<u>Average Annual Output</u>
Reforestation	3500 acres
Thinning	6000 acres
Site Improvement	800 acres
Access	160 easements
Road Construction	36 miles

Most of these practices must be planned, programmed and implemented in advance of timber harvest as shown below:





The proposed schedule to reach the full sustained yield level with intensive practices and adequate support requirements:

	<u>FY 1978</u>	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>
Million Board Feet	75	89	100	130	130

Based on current calculations of land area, growth, and timber rotation age, the FY 1981 level of harvest could be sustained over 40 decades. Verification or adjustment of this harvest level are part of the planned program to insure that the cutting level does not exceed the capacity of the forest to continuously produce this level of timber and other forest products.

Budget Authority  
\$ Millions

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>4 Year Authorization Total</u>
Forest Management (outside W. Oregon)	7.5	7.5	7.5	7.5	7.5	30.0
Forest Management (Western Oregon)	<u>1.3</u>	<u>1.3</u>	<u>1.3</u>	<u>1.3</u>	<u>1.3</u>	<u>5.2</u>
Total	8.8	8.8	8.8	8.8	8.8	35.2

Positions

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Forest Management (outside W. Oregon)	202	202	202	202	202
Forest Management (Western Oregon)	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>
Total	228	228	228	228	228

Accomplishments

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Sell Timber (MMBF)	75	89	100	130	130
Other Forest Products (#)	30,000	37,000	38,000	39,000	40,000
Intensive Practices (acres)	2,500	4,000	5,000	6,000	6,500
Activity Plans (#)	30	30	30	30	30



## FOUR YEAR AUTHORIZATION

### RANGE MANAGEMENT

#### GOALS

The Bureau of Land Management's range program includes livestock and wild horse and burro management on the public lands. The goals for managing these two program components are:

1. Provide forage for domestic livestock in harmony with other public land uses to stabilize the livestock industry and maintain good to excellent vegetation conditions.
2. Manage wild horses and burros at a population level that would maintain them as a natural part of the western rangelands in harmony with other forage uses of the public lands.

#### BACKGROUND

In the mid 1800's through the early 1900's, the western rangelands supported large herds of sheep and cattle. Ranges were open to all who wished to pursue the livestock business and provided a means that helped settle the west. This uncontrolled use resulted in range deterioration. Soil erosion was accelerated, drastic vegetative changes occurred and wildlife habitats were altered. Congress recognized this abuse and in 1934 passed the Taylor Grazing Act that provided for control and regulation of the Federal ranges. The Grazing Service was established to administer the program, spending the first 10 years setting up grazing advisory boards and establishing boundaries for grazing units. When the Bureau of Land Management was established in 1946 through consolidation of the General Land Office, the Grazing Service and the Oregon and California Grant Lands Office, grazing regulations were far enough developed to provide management guidelines. In 1967, adjudication of forage was completed on all grazing lands. Once this was accomplished, BLM initiated intensive livestock management practices to carry out the grazing goals. With passage of the Wild Horse and Burro Act in 1971, BLM was charged with protecting and managing these animals on public lands. Since protection has been provided, populations of wild horses and burros have increased to the point where they are frequently depleting the range to the detriment of themselves, livestock, wildlife, and soil and water conditions.

Today, the Bureau of Land Management administers some 172 million acres of public lands in the 13 western states where domestic livestock grazing occurs. These lands provide a portion or all of the forage needs for approximately 3.3 million cattle, 4 million sheep and 15 thousand domestic horses. Approximately 24,000 grazing authorizations are issued each year for 12 million animal unit months of forage. In addition, some 41 million acres provide forage for an estimated 70,000 wild horses and burros.



The principle authorities for administering grazing on public lands are:

- Taylor Grazing Act of 1934
- Bankhead-Jones Act of 1937
- National Environmental Policy Act of 1969
- Wild Horse and Burro Act of 1971
- Federal Land Policy and Management Act of 1976

PROGRAM ACTIVITIES

BLM's activities have been oriented toward the broad program goals. These activities and the FY 1978 budget include:

Use Authorizations \$4,500,000

This activity includes annual issuing of some 24,000 grazing licenses and leases, processing an average of 1,000 grazing use, processing an average of 13 easement acquisitions, making an average of 9 adjustments in range use, and responding and processing an average of 40 grazing appeals.

Use Supervision \$2,900,000

This activity includes conducting resource studies and evaluating 1,158 grazing management systems, making compliance checks on 1,158 grazing management systems and the 23,000 grazing authorizations, and processing an average of 600 trespass cases.

Research and Studies \$ 300,000

This activity includes applied grazing research and studies undertaken independently or in cooperation with other agencies or institutions. Presently 62 resource studies and 28 cooperative research projects are being conducted.

Resource Inventory \$9,000,000

This activity includes data gathering and mapping basic vegetation, range suitability studies and other studies prior to implementation of management grazing systems. Annual inventories include approximately 12 million acres of vegetation and wild horse and burro population trends and annual conditions.

Environmental \$3,700,000

This activity includes developing 8 environmental statements, preparing an average of 1,000 environmental analyses and reviewing 7 environmental statements prepared by other agencies.



Action Plan

\$ 700,000

Activity plans are called allotment management plans (AMP's). They provide for proper use of forage plants through specifying season of use, intensity of use, and periodic rest. These plans are developed in cooperation with the range user and other involved agencies to determine rancher's needs and objectives, as well as the BLM's. They also outline project developments required, development cooperation and maintenance responsibility. The final plan is approved by the operator and the BLM prior to implementation. In FY 1978, 125 AMP's will be prepared.

Project Development \$9,400,000

This activity includes planning and developing some 1,000 range improvement projects for the primary purpose of maintaining, improving, or facilitating the range program.

Administration \$4,600,000

This activity includes purchasing equipment, renting office and storage space, and paying utilities. It provides for coordinating the range program with other resource programs, all clerical work, employee training, public information and education, and general inquiries and reports. It also includes chartering, conducting, and managing grazing advisory board activities which includes travel and per diem for each member.

Project Maintenance \$4,000,000

This activity provides the maintenance for all projects developed especially for the range program.

Annual maintenance averages 900 miles of fence, 120 cattle guards and passes, 2,300 water developments, 5,000 acres of land treatment and all equipment and tools that benefit the program.

Total FY 1978 Program \$39,100,000

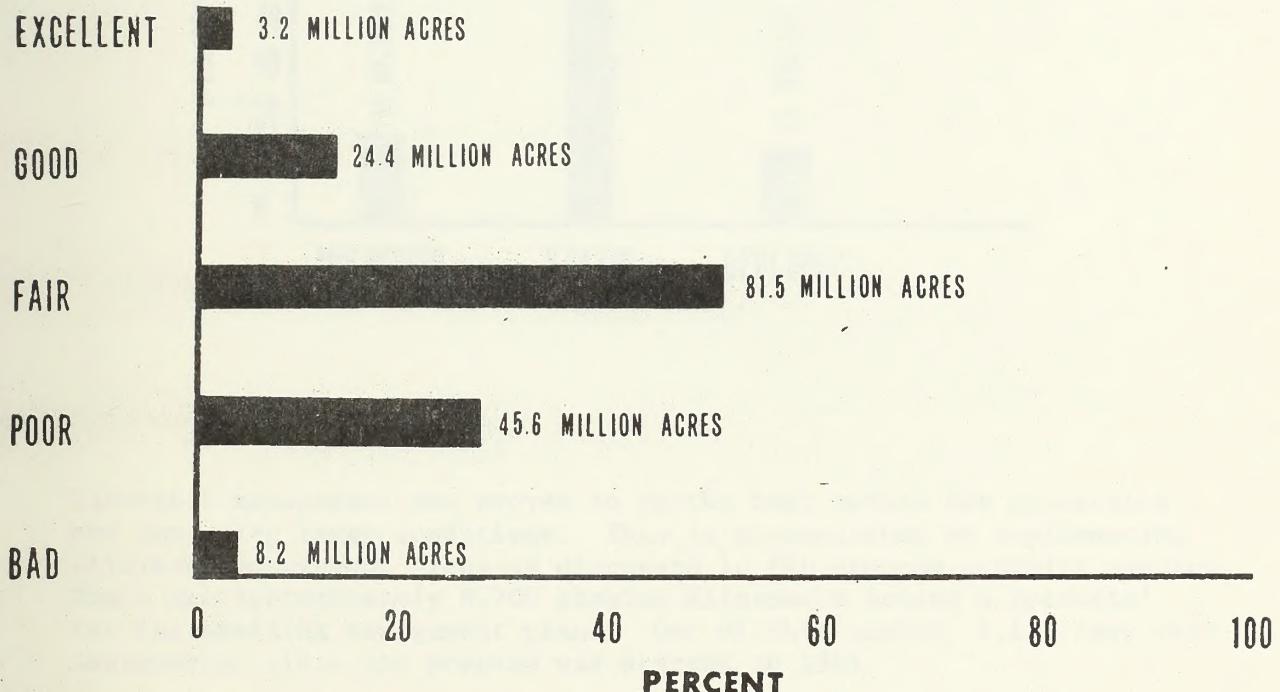


## SITUATION

Approximately 135 million acres of Federal ranges are considered to be in less than satisfactory condition; that is classified in fair, poor, or bad condition.

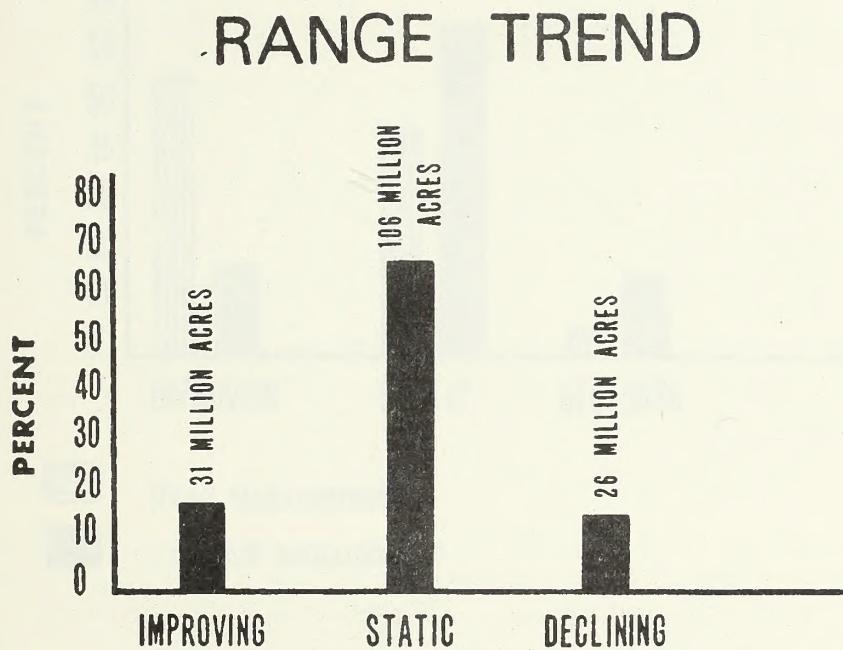
## RANGE CONDITION

CONDITION





Trend in range condition indicates that only 19 percent of the Federal ranges are improving.

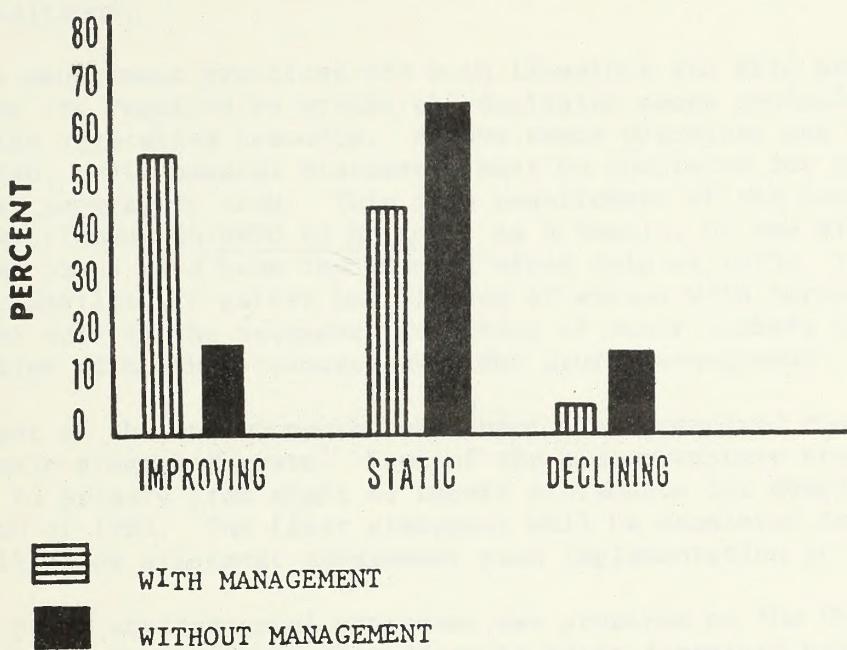


Livestock management has proven to be the best method for protecting and improving range conditions. This is accomplished by implementing allotment management plans as discussed in the program activity section. There are approximately 8,700 grazing allotments having a potential for implementing management plans. Out of this number, 1,158 have been implemented since the program was started in 1964.

Approximately 25 million acres are under allotment management plans. Range trend on these acres have shown a marked improvement compared with areas where intensive grazing management has not been implemented.

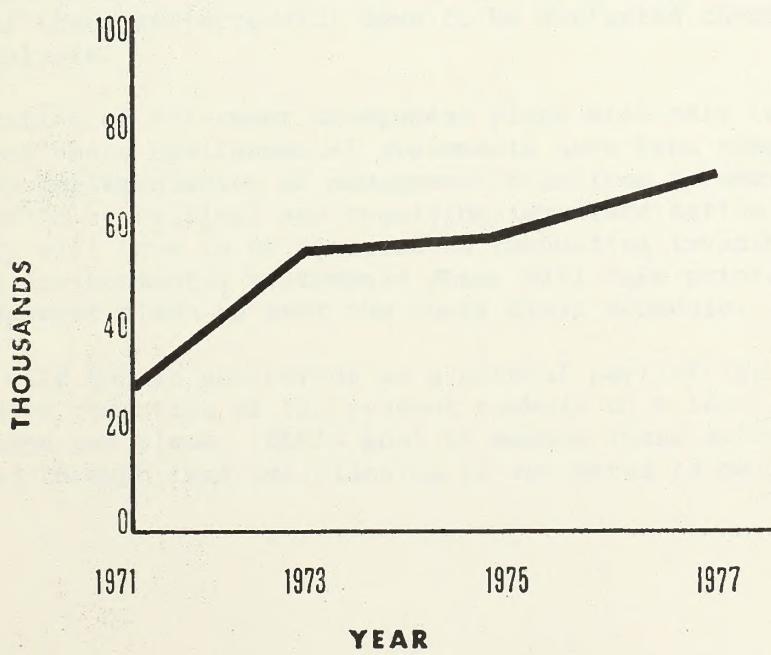


# RANGE TREND COMPARISON



With the protection of wild horses and burros since 1971, animal numbers have increased by 159%. Animal numbers in 1971 were estimated at 27,000 and today they are determined to be approximately 70,000.

## WILD HORSE & BURRO NUMBERS





As animal numbers increase, greater stress is placed on the range. Competition for forage between wild horses and burros, livestock and wildlife is keen. This intensive use has accelerated the decline in range conditions.

Intensive management practices for both livestock and wild horses and burros are required to arrest the declining range conditions and improve the vegetative resource. Before these practices can be implemented, environmental statements must be completed for that particular geographic area. This is a requirement of the court ordered settlement in NRDC vs Morton. As a result, no new allotment management plans have been implemented since July of 1975. In addition, limited capability to gather and dispose of excess wild horses and burros has delayed the necessary reduction of their numbers to bring them in line with other resource uses for proper management.

Development of the environmental statements have required changes in the basic program thrusts. Each of the eleven western states is required to prepare from eight to twenty statements for completion by the end of 1988. The first statement will be completed in early 1978 which will allow allotment management plan implementation in 1978.

When the pilot environmental statement was prepared on the Challis area in Idaho, it was found that adequate basic inventory was lacking to fully assess the grazing impacts. Because of this deficiency, more effort was placed into gathering new and updating existing information. As a result of this requirement, the court order agreement schedule could not be met and a renegotiation is now underway. These requirements have further delayed the implementation of allotment management plans allowing range deterioration to continue at the present rate.

Once the grazing statements are completed, project developments such as fences, water, and livestock trails will be required to implement the management systems. Before development, however, the environmental impacts of these projects will have to be evaluated through an environmental analysis.

Implementation of allotment management plans will only take place on those areas where environmental statements have been completed. This will delay implementation of management practices on many areas considered to be critical and requiring immediate action. Implementation capability will have to be diverted to conducting inventories, and preparing environmental statements which will take priority over allotment management plans to meet the court order schedule.

Managing wild horses and burros as a natural part of the public lands will require reduction of the present numbers to a level determined through land use plans. BLM's goal to manage these animals at a number determined through land use planning is estimated to be 30,000 animals



(this is an estimate that will require refinement once all land use plans have been completed). To reach this goal by 1987, an estimated 116,000 excess animals will have to be removed. Once the management numbers have been reached, 4,500 animals will have to be removed each year to maintain that level.

Disposal of excess animals has become the major difficulty in meeting management objectives. When excess animals have been gathered from the ranges, they are placed in corrals requiring feed and care for as much as five months before adoption. Wild horses placed in confinement have contracted disease where domestic horses have developed a natural immunity. Since the adopt-a-horse program is BLM's vehicle for disposal of excess animals they must be in good health before they will be accepted by an adoptor or allowed to be transported across State lines. Many people have applied to adopt horses, but when given the opportunity, turn down the offer, leaving BLM to care for the animal, destroy it, or turn it back out on the range. Much of the problem stems from people's reluctance to travel hundreds or thousands of miles to pick up a horse and transport it to their residence. BLM is presently exploring the possibility of establishing distribution centers east of the Mississippi River where a large source of potential adoptors reside. Wild horses and burros cannot be sold and remain in the custody of the United States. This has resulted in BLM having to pick up, feed, and care for unwanted horses that were adopted until they could be readopted, transported back to public lands, or destroyed. With thousands of animals adopted to individuals under a cooperative agreement, enforcement of the law to ensure that the animals are not used for commercial gain will be a gigantic task.

#### PROGRAM PLAN

##### Objectives

Specific objectives for the 4 year authorization period are:

- Complete environmental statements on 80 million acres of public land.
- Improve range conditions on 20 million acres of public land by implementing 1,300 intensive livestock management plans.
- Provide adequate use supervision for 2,700 implemented allotment management plans.
- Protect, manage, and maintain a viable horse and burro population by removing approximately 55,000 excess animals.



## Action Plan

BLM's plan for carrying out the range program includes:

- Gathering adequate resource data for input to cooperative management plans (allotment management plans) and land use plans.
- Write environmental statements on vegetative allocation for livestock, wild horses and burros, wildlife, watershed protection, and recreation or aesthetic purposes.
- Prepare and implement cooperative management plans with livestock operators.
- Supervise, study, and evaluate management plans to ensure that they are meeting objectives.
- Reduce wild horse and burro numbers to management levels.
- Prepare and implement wild horse and burro management plans.

Inventory is the basis for determining the management actions necessary to improve range conditions on public lands. Sound management actions cannot be made without sufficient knowledge of the resource, its potential and use. Methods are being finalized to streamline and improve the inventory procedures to provide adequate information for completing all planning phases. A schedule for conducting inventories on a four year average of 13 million acres annually is being established to complement the planning effort as it is affected by the environmental statement schedule.

Environmental Statements: A major thrust in the range program is to complete environmental statements. A new procedure to base the environmental statements proposed action on vegetative allocation rather than management under the allotment management plan is now being developed. Acceptable environmental statements are based on adequate information to fully assess impacts of the proposed action. For this reason, the inventory, planning, and environmental statement programs are closely tied together as a necessity to accomplishing the range program objectives.

Allotment Management Plans: Allotment management plans are developed in cooperation with the range user. Cooperative development may include the operator's own development of private lands to be made a part of the grazing system. Grazing operations that include both BLM and Forest Service or other agency administered lands are also developed cooperatively to establish an economic unit. Each plan requires an average of two man-months to develop the grazing system, plan the projects and get the approval of both parties. Implementation requires development such as fences and water for livestock control. Depending on the projects required to facilitate the plan, it can be implemented in one year or it may take several years. During this implementation period, interim systems are developed for phasing into the planned system.



Management Supervision: When the management plans are implemented, range studies such as actual livestock use, forage utilization, range trend, and climatic data must be conducted on a set schedule. These studies are the basis for evaluating the grazing system and determining if the objectives are being reached. In addition to studies, each allotment must be supervised to ensure that the grazing system is being followed and to solve unanticipated problems. Supervision also includes an allotment inspection with the operator to discuss the past years grazing use and determine changes if adjustments are needed. The supervision program requires an average of one half man-month per allotment management plan per year.

Wild Horse and Burro Management: Once wild horse and burro management numbers have been established excess animals are removed to maintain this number. Determining wild horse and burro population trends requires periodic inventories to systematically cover the 41 million acre habitat area. As the excess numbers are determined, selected animals are trapped or gathered by roundup and placed in central holding corrals. Removing excess animals poses a special problem where the remainder of a reduced herd or band must contain a balanced sex and age ratio. Once the animals are placed in holding corrals, they are checked by a veterinarian and prepared for adoption. Those who have applied for adoption through the adopt-a-horse program and meet the requirements are notified concerning availability and location of the animals. The distance that an adoptor is required to transport the animal many times discourages acceptance. BLM is assessing the possibilities of transporting animals to central locations where a majority of the applicants reside.

The cost of removing excess horses is a concern of BLM. Programs such as improving the adoption procedures, animal sterilization to reduce offspring and amendments to the Act are being considered to reduce the high cost (\$300/head average) of gathering, caring, and adopting the animals.

Wild Horse and Burro Management Plans: As the animal numbers are reduced to the desired level, herd management plans are developed and implemented to fit in with other public land uses. BLM is studying the feasibility of managing wild horses and burros in areas where livestock management plans have been developed. Wild horse and burro management is not totally compatible with livestock management. Livestock management requires fencing and movement from one pasture to another to protect/improve range conditions. Wild horses and burros cannot be managed in this manner without some degree of domestication. For this reason, consideration is being given to establishing wild horse or burro ranges where management would be centered around the wild animal.



BUDGET AUTHORITY  
\$ Millions

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>4 Year Authorization Total</u>
Range	\$27.2	\$27.2	\$29.5	\$30.0	\$31.5	\$118.2
Wild Horses & Burros	3.1	3.1	5.5	8.0	8.5	25.1
Total	30.3	30.3	35.0	38.0	40.0	143.3
Range Improvement <u>1/</u>	(8.8)	(8.8)	(8.8)	(8.8)	(8.8)	(35.2)

Positions

Range	658	658	695	702	702
Wild Horses & Burros	31	31	64	84	100
Subtotal	(689)	(689)	(759)	(786)	(802)
Range Improvement	50	50	50	50	50
Total Range	739	739	809	836	852

Accomplishments with Authorization

Acres Inventoried (Millions) Each Year	9.6	5.7	5.8	5.8	5.8
Acres Under Management (Millions)	28.9	33.5	38.5	45.1	51.7
Excess Wild Horses and Burros Removed Each Year	6,500	6,500	11,400	21,700	15,200
Allotment Management Plans Supervised	1,390	1,660	1,955	2,335	2,715

Revenues  
\$ Millions

Grazing Fees Collected <u>2/</u>	17.5	17.5	17.5	17.5	17.5
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1/ Not subject to authorization.

2/ Revenues are subject to the amount of grazing fee charged per animal unit month. These figures are based on the current rate of \$1.51 per animal unit month.



## FOUR YEAR AUTHORIZATION

### RECREATION

#### GOALS

The Bureau of Land Management's Recreation program includes management and protection of recreation resources and visitors on public lands, and management and protection of cultural, natural history, visual, and wilderness resources.

In 1976, 80 million recreation visits were made to the public lands for the purpose of hiking, hunting, fishing, camping, off-road vehicle riding, rockhounding, sightseeing, etc.

The broad goals for managing the recreation program are:

- Protect resources in response to heavy recreational uses such as off-road vehicles, river rafting, hiking, and camping.
- Provide adequate visitor contact and public information, and administer permit system to inform, control, and protect visitors.
- Provide an access, construction, and facility maintenance effort to protect resources, provide sanitary facilities and provide for visitor use, enjoyment, and safety.
- Encourage State and local governments, when appropriate, to develop and manage public land recreation resources.
- Provide recreation resource information for input into the Bureau Planning System.

#### BACKGROUND

From the time the Bureau of Land Management was established in 1946, to the passage of the Classification and Multiple Use Act of 1964, recreation management has been primarily oriented towards providing camping and picnicking areas at sites which were heavily used by recreationists. The Classification and Multiple Use Act recognized that major portions of public land in the western states and Alaska possessed public values which should be managed for multiple uses including recreation. In addition, the law provided ways to designate and segregate certain lands primarily for recreation use. Recognition of these values led to identification, interpretation, and establishment of management objectives for significant recreation values.

Recognition of these values also led to increased use for such activities as ORV use, water sports, collecting, environmental education, winter sports, hunting, fishing, and camping. From 1964



to the present the annual visitation has increased from 12 million visitors to 80 million visitors. Increased leisure time, awareness of public land values and increased mobility are all factors in this increase.

Additional legislation during the last decade has increased Bureau responsibility to identify and protect significant cultural, natural history, recreation, visual, and wilderness resources.

- Land and Water Conservation Fund Act of 1964.
- National Historic Preservation Act of 1966.
- National Wild and Scenic Rivers Act of 1968.
- National Trails System Act of 1968.
- National Environmental Policy Act of 1969.
- Executive Order for Protection and Enhancement of the Cultural Environment.
- Executive Order for Use of Off-Road Vehicles on Public Lands.
- Federal Land Policy and Management Act of 1976.

This legislation led to the establishment of various components of the Bureau's Recreation program.

#### PROGRAM ACTIVITIES

BLM's activities have been oriented toward the broad program goals.

These activities and estimated FY 1978 expenditures are:

<u>Use Authorization</u>	\$1,850,000
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The Bureau has a permitting system in effect and fees and stipulations may be established for outdoor sports events, off-road vehicle use, organized groups, collecting areas, scientific study of antiquities and paleontological sites as well as other uses where resources are valuable or fragile. The current level of such permits is 1,000. Compliance work is included as a part of permit management.

<u>Site Protection</u>	\$ 600,000
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This activity involves preparing plans for protection of cultural resources and implementation of plans. These include measures which reduce destruction of sites by vandalism or natural forces such as signing, ruin stabilization or fencing. The current level is 50 sites/ per year.



Visitor Assistance \$2,650,000

Includes supervising recreational use in identified or designated areas and at developed sites. It also includes routine use supervision through patrols and detection of trespass as well as rangers in the California Desert. The most important phase of this work is information and education of the public concerning the values and uses of the public land. Management is provided to an estimated 4,500,000 visitors on an annual basis.

Inventories \$2,550,000

Inventories are conducted to provide basic information about recreation, cultural, visual, natural history, rivers, trails, and wilderness resources. Archeological sites, scenic vistas, caves, and roadless areas are a few of the resources which attract millions of visitors to the public lands. Inventories which quantify and qualify these and other values are used to help make land use allocations and identify protection and management needs. Inventories needed in FY 1978 will primarily include cultural and visual inventories and mineral surveys for the wilderness review. Approximately 30 million acres will be inventoried.

Plans, Nominations, and Studies \$1,800,000

River, trail, historical, roadless and other resources often have national as well as local significance, and studies by the Bureau are used to evaluate their significance. Such studies may be the basis for legislation, management or special designation to preserve and protect their values or to become part of national systems. Studies for wilderness and rivers and trails are required by legislation. Interpretative studies and management plans are prepared for these and other areas to aid visitor use, enjoyment, and protection. Currently this activity will result in 100 studies and plans completed annually.

Total \$9,450,000

#### SITUATION

Today the Bureau of Land Management is providing protection and management on the following resources:

- 11 primitive areas totalling 234,000 acres.
- 160 natural areas encompassing 895,000 acres.
- 30 special recreation lands areas containing 3.1 million acres.
- California Desert Conservation Area with 12 million acres.



- 45 recreation and whitewater rivers with 2,500 miles suitable for recreation use. Three rivers are designated as National Wild and Scenic Rivers and twenty others are being considered for inclusion in the system.
- 216 miles are currently designated as National Recreation Trails (four), and National Scenic Trail (one). 5,300 miles of trails crossing public lands are under study.
- 500 cultural and historical properties of significance have been identified.  
Seventy properties are presently on the National Register of Historic Places and one hundred more are under consideration.
- 250 developed recreation sites with 4,000 units for camping and 250 primitive campgrounds.
- 180 million acres of public land in Lower 48 States receiving dispersed recreation use.
- 90 million acres of public land in Alaska estimated to remain under Bureau management with potential access via Alaska pipeline road.

#### PROGRAM PLAN

##### Objectives

Specific objectives for the 4 year authorization period are:

- Provide implementation of the California Desert Plan which must be completed by September 30, 1980.
- Complete the Wilderness Review on 55 natural and primitive areas by July 1, 1980. Initiate the 15 year review of all 5,000 acre roadless tracts and roadless islands on public land.
- Complete off-road vehicle designation on over 50 million acres by 1980. Have all public lands designated and under management with regard to ORV use by 1987.
- Meet 100% of recreation management requirements and permit needs for antiquities and natural history permits, special recreation use permits, organized off-road vehicle use, commercial enterprises and other special uses.
- Complete inventories for natural, cultural, visual, and rivers and trails resources needed to provide input to Management Framework Plans scheduled for completions on a 6 year cycle.
- Prepare plans, nominations, and studies required by legislation on rivers, trails, historic sites, and other unique or critical recreation resources. Other plans will be required through the Bureau Planning System. An estimated 400 such plans should be prepared and implemented by 1982.



## Action Plan

BLM's plan for carrying out the recreation program components includes:

- Continue critical interim management.
- Gather data and conduct studies to evaluate program needs and to recommend land use allocations.
- Prepare activity plans for development and protection.
- Implement plans and evaluate plan effectiveness.

## California Desert

Critical interim management of resources and people has been underway for some time because of the many unique and irreplaceable resources found in the California Desert and because of its proximity to 12 million people living in southern California, Nevada, and Arizona.

The Federal Land Policy and Management Act of 1976 requires that a comprehensive plan be developed and implemented by September 30, 1980.

The unmet needs in the California Desert involve the following:

- Visitor management and control to reduce vandalism and damage to valuable resources and to achieve compliance with programs such as the desert vehicle program.
- Resource interpretation and information to provide visitor understanding of the desert environment and opportunities.
- Reduction of desert hazards and unsafe visitor actions. In 1975 there were 50 fatalities and 760 serious injuries on public lands in the desert.
- Protection of important archeological, historical, and paleontological sites to curtail destruction and stabilize the remnants.

The proposed program increases the capability to meet these demands as developed in the California Desert Conservation Area Plan.

## Wilderness

55 areas already identified as primitive or natural areas must be reviewed by the Bureau and reported as suitable or nonsuitable for preservation as wilderness areas by July 1, 1980. Those 55 areas, containing 627,000 acres, are all located within the 11 western states and Alaska. Roadless areas adjacent to these already identified areas increases the total area to be studied to 2,600,000 acres.



In addition, the Bureau will initiate "new studies" of roadless area tracts in excess of 5,000 acres and roadless islands to be completed and reported within 15 years. The capability is provided to complete the existing study areas, to complete an accelerated inventory of roadless areas and to initiate the review of additional areas which will meet the 15 year deadline.

To accelerate the wilderness review process, the Bureau proposes to conduct a 2-year roadless inventory and wilderness characteristic review on the public lands. This inventory will permit the Bureau to determine those tracts of land needing further study and will release other tracts for multiple use management.

#### Off-Road Vehicles

Designation of all public land areas as open, closed, or regulated should be accomplished by 1987. Priorities have been set for these designations which must be proceeded by inventory, analysis, and, if necessary, updating of Management Framework Plans. Current ORV use is estimated at 5 million vehicles and 14 million visitor days annually.

In order to meet its responsibilities under Executive Order 11644, the Bureau has committed itself to having all public lands under ORV designation by the end of FY 1987. The Bureau has further committed itself to having specified areas under ORV designation by the end of FY 1981 and by the end of FY 1983. Priorities and timetables were established based on intensity of use and potential for resource damage.

#### Recreation Management and Permit Program

This objective will be met by controlling and managing use in all areas where permits or surveillance are needed to protect resources, recreation opportunities, and protect visitors:

- Caves, paleontological, biotic, and geologic, and cultural resources have value for educational and scientific study. Approximately 560 permits annually.
- River floating is managed by establishing carrying capacity and issuing permits to individuals and commercial outfitters. Approximately 120 permits annually.
- Recreation lands areas and developed recreation sites will receive management required by plan or by public demand.
- Organized off-road vehicle use requires approximately 320 permits annually.



## Inventory

To meet the objectives shown in the program plan, the following inventories will be conducted:

- Complete Phase I (Extensive) cultural inventories on 100 million acres and Class II (Sample Plots) on 30 million acres.
- Complete an estimated 100 site specific inventories for natural history plans, specific recreation developments, and river and trail plans.
- Conduct analysis of existing inventory information and maintain or conduct new inventories to provide current data for Management Framework Plans on a 6 year cycle.

## Plans, Nominations, and Studies

Twenty recreation and whitewater rivers are currently being considered for inclusion in the National Wild and Scenic Rivers System and several studies are being conducted by the Bureau of Outdoor Recreation. The BLM manages considerable land adjacent to these rivers and will participate in all such studies. Over 5,000 miles of trails also cross public lands with many significant features. Many of these sites will also require studies and plans. Other special features including hundreds of cultural and historical sites are located on public land and may have national significance.

The Bureau will develop studies, plans and nominations as needed to protect these resources, first on an interim management basis and, in response to specific legislation or other requirements, to provide full management if necessary to protect these special resources for continued public use and enjoyment.



BUDGET AUTHORITY

\$ Millions

4 Year  
Authorization

Recreation Management	1978	1979	1980	1981	1982	Total
Cultural	1.7	1.7	1.7	1.7	2.7	7.8
Visual	.4	.4	.4	.4	.9	2.1
Natural History	.2	.3	.3	.3	.7	1.6
Off-Road Vehicles	.3	1.5	2.5	3.0	3.0	10.0
Rivers and Trails	.5	.9	.9	1.0	1.7	4.5
Wilderness	1.9	9.5	9.5	9.5	9.5	38.0
Other Recreation	4.4	5.8	6.2	7.6	11.5	31.1
Total	9.4	20.1	21.5	23.5	30.0	95.1

Positions

Cultural	32	32	32	32	42
Visual	7	7	7	7	14
Natural History	4	4	4	4	9
Off-Road Vehicles	4	25	45	45	45
Rivers and Trails	7	19	19	23	33
Wilderness	14	196	196	196	196
Other Recreation	100	128	140	155	155
Total	168	411	443	462	494

Accomplishments with Authorization

	1978	1979	1980	1981	1982
Permits Increased (No.)	1,000	1,500	2,000	2,500	3,000
Sites Protected (No.)	50	50	75	100	125
Plans, Studies (No.)	100	140	150	160	170
ORV Designations (000 Acres)	0	10,000	40,000	40,000	40,000
Inventories (000 Acres)	30,000	35,000	40,000	20,000	20,000



## FOUR YEAR AUTHORIZATION

### SOILS, WATER AND AIR MANAGEMENT

#### GOAL

The Soil, Water and Air program is designed to conserve, improve and manage the soil, water, air, and geologic resource base on the public lands.

#### BACKGROUND

The Soil, Water and Air program has evolved from the Soil and Moisture program established in 1935 to protect and improve critically eroded areas. As natural resource values changed and public land uses increased, the early program was modified. With more intensive management, programs included in soil and moisture were segregated to form an independent activity. New dimensions in resource management required greater resource information to resolve conflicts between one or more uses in the same area. Soil and water, as basic resources, took on greater emphasis in managing action programs such as range, wildlife, recreation, and forestry. This required the soil and moisture program to provide information as a support to these programs. As greater importance was placed on air quality, the soil and moisture program was changed to soil, water and air.

Today the program provides guidance to other programs for protection, maintenance, or enhancement of soil, water, and air associated with the public lands. In addition, it provides pesticides management, emergency rehabilitation practices, and management of threatened and endangered plants.

#### PROGRAM ACTIVITIES

Activities for carrying out the program's objectives and FY 1978 annual expenditures are:

<u>Resource Inventory</u>	<u>\$2,800,000</u>
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This activity includes mapping, gathering and analyzing soil water and air information. It also includes preparation of inventory contracts, field reviews and all costs of field equipment, maps, aerial photography, etc., that are required in obtaining and storing the resource data. Inventories for FY 1978 will include 1.1 million acres for soil-vegetative information, 10 air quality studies, and 1,200 miles of water quality inventories along streams and rivers.



Research and Studies \$1,300,000

This activity includes research and studies for soil and watershed conservation and development undertaken independently through contracts with State Universities or cooperatively with other agencies. Presently 115 resource studies and 25 research projects are being conducted.

Administration \$4,600,000

This activity includes purchasing equipment, renting office and storage space, and paying utilities. It provides for coordinating the program with other programs, all clerical work, employee training, public information and education, and general inquiries and reports. Also included is \$844,856 for Bureau-wide employees compensation.

Project Maintenance \$1,100,000

This activity provides for maintenance of land treatments such as vegetative control projects, seedings, water control structures and equipment that is used primarily to benefit the soil, water, and air program. Projects maintained during FY 1978 include 40 miles of fence, 11 cattleguards or antelope passes, 120 water control structures, 8,000 acres of land treatment and abandonment of 20 miles of road.

Project Development \$1,500,000

This activity provides for development of all projects primarily for the benefit of soil and water conservation and improvement. Developments for FY 1978 include: 10,000 acres of mechanical treatment, 62,000 cubic yards of earth fill for dikes and dams, 40 miles of fence and 10 cattleguards.

#### SITUATION

Natural erosion on the public lands has been accelerated in many areas. Misuse by grazing, logging, construction, off-road vehicle use and others have left some areas with shallow soils that were once several feet thick. Present erosion conditions vary from stable to severe. The current watershed inventory covering some 132 million acres show condition classifications as follows:

<u>EROSION CONDITION CLASS</u>	<u>(Thousands)</u>	
	<u>ACRES</u>	<u>%</u>
Stable	10,610	8
Slight	69,854	52
Moderate	43,653	32
Critical	7,732	5
Severe	492	3
Total	*132,341	100

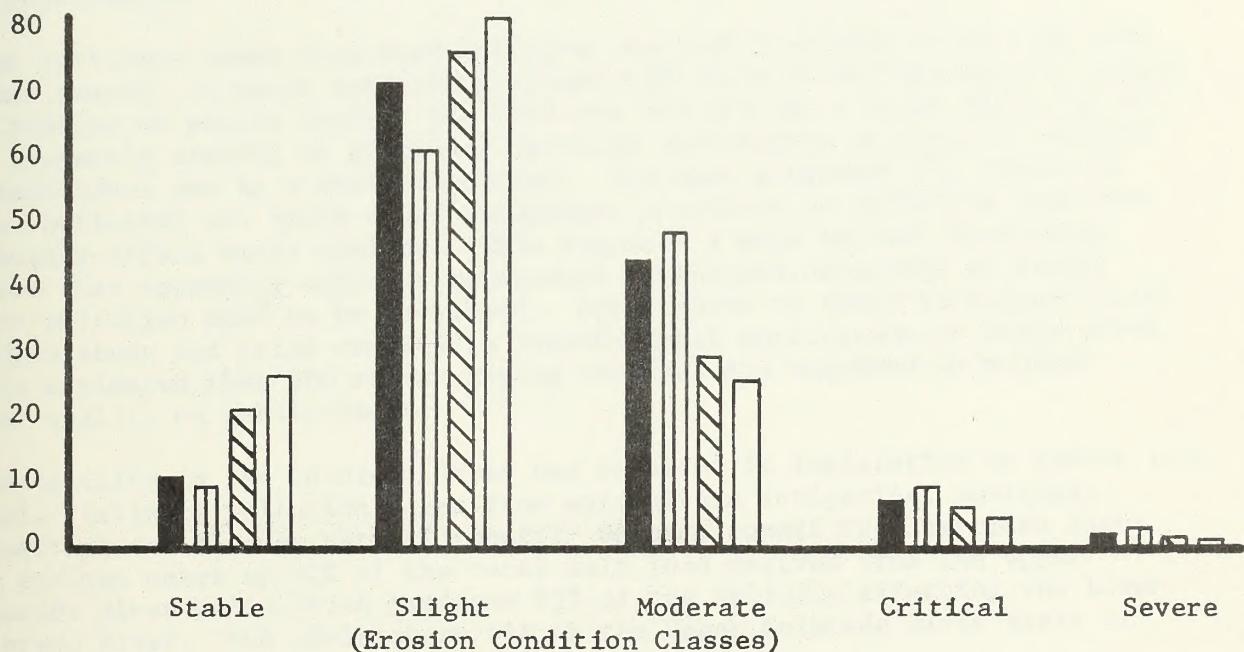
\* Total acres where a watershed inventory has been completed.



Based on actual known situations, erosion conditions will deteriorate or improve depending on those practices applied. After a 15 year period, erosion conditions without a change in management practices, with intensive management and with both intensive management and improvement projects are shown on the following chart:

EROSION CONDITION AFTER 15 YEARS

(Acres  
Millions)



- Present Condition
- Without Management Change
- With Intensive Management
- With Intensive Management and Improvement Projects



Some 50 million acres of public land have an adequate soil survey that can be used for analyzing and predicting erosion conditions. An additional 125 million acres will require some level of soils inventory to adequately assess resource use impacts necessary to form land use decisions. Soils information is a necessary item for all of the grazing environmental statements that are scheduled for completion through a court ordered agreement. Inventories, therefore, must be scheduled to meet the environmental statement schedule. Since the statements have little flexibility in when they will be completed, all programs that support this effort are being driven by the schedule. Soil inventories are contracted with the Soil Conservation Service, universities or private consulting groups. Contracting sources, however, are limited and cannot presently provide the services required to meet schedules and commitments.

Water pollution comes from many different sources including natural as well as man caused. A water monitoring system will have to be developed to assess the problem on public lands. The USGS and EPA provide a broad base, but are not presently capable of providing detailed information on specific effects of individual use in a small watershed. BLM must determine the causes of water pollution and apply sound management practices or eliminate uses that adversely affect water quality. This requires a more intense monitoring system than presently exists. Management techniques necessary to arrest water pollution need to be developed. Application of these techniques first require study and trial results to justify their application to large areas. It is estimated that 500 stream gaging stations are required to monitor water quality on public lands.

High salinity in the Colorado River has resulted in legislation to reduce this level. Salinity pollution comes from agriculture irrigation, municipal, industrial and through natural runoff. Natural runoff from overland flows and springs makes up 52% of the total salt load derived from the Upper Colorado River Basin which produces 72% of the salinity affecting the Lower Colorado River. BLM administers 44% of the Upper Colorado River Basin or 27.3 million acres.

The increasing salinity in the Colorado River is having a direct economic impact on agriculture, municipal and industrial costs. Reducing the total salt content by 10 milligrams per liter will reduce agriculture damage by \$13 million, municipal damage by \$12.5 million and industrial damage by \$1.5 million in a ten year period.

Studies show that water from the public lands in the Upper Colorado River Basin varies between 500 and 5,000 milligrams per liter. Reducing this high salt content will require intensive management and mechanical treatment that will control salt movement.



There are 19 proposed developments such as coal gasification plants, coal fired and geothermal power plants that will have an effect on air quality. These proposed projects are all found totally on public lands that will require air quality studies to provide information needed in determining controls for protecting the air quality. Since each proposed project area has different air currents, terrain, prevailing winds, population centers, and state air quality standards, it will be necessary to conduct individual studies for each site.

Section 7 of the Endangered Species Act requires that endangered plants be conserved. This prohibits actions which may jeopardize species, destroy or adversely change their critical habitat. Because of these requirements, endangered plant species will take precedence over all other uses. This precedence is in direct conflict with other statutes such as the general mining laws or conflicts between endangered fish and wildlife within the act itself.

Existing vegetative inventories are not completed in enough detail to determine the extent or abundance of endangered plants believed to occur on public lands. This coupled with a lack of knowledge as to the adverse impacts to endangered plants by other uses, may limit or stop other public land uses until impacts can be identified. It is anticipated that more than 200 plants on public land will be officially listed by the Fish and Wildlife Service as endangered species to be protected under mandatory provisions of the Endangered Species Act (P.L. 93-205).

## PROGRAM PLAN

### Objectives

Specific objectives for the 4 year authorization period are:

- Conduct site inventories (soil and vegetation) on 26 million acres to provide basic information for the Bureau planning system.
- Install 500 water quality monitoring stations to determine chemical and biological water conditions for planning purposes.
- Conduct basic air quality inventories on proposed developments that could have an impact on quality.
- Initiate the San Simon Valley watershed restoration program.
- Protect and manage the estimated 200 plant species on the public lands proposed for classification as endangered under the Endangered Species Act.
- Initiate the salinity reduction program on some 27 million acres in the Upper Colorado River Basin determined to be a major source of salinity in the Colorado River.



- Improve watershed conditions on 18.8 million acres of public land through management and land treatment.

#### Action Plan

The action plan to carry out the soil, water, and air program includes:

- Conducting inventories to supply adequate data for the soil, water, and air program and in support of other resource programs for land use decisionmaking.
- Preparing activity plans for protection, development and maintenance of the soil, water, and air programs.
- Implementing activity plans.
- Maintaining projects developed primarily for the soil, water, and air programs.
- Monitoring water and air quality and erosion trends to insure that objectives are being met.

#### Inventories

The soil, water, and air program provides basic inventories for its own programs as well as support for range, forestry, wildlife, minerals, and recreation. The site inventory method conducted by this program is designed to inventory soils, vegetation, limited wild animal census, range condition and trend, vegetative production, climatic variation, shrubs, and watershed conditions. The inventory is not capable of meeting all needs and it will be necessary for resource programs to conduct intensive studies on specific areas to gather more detailed information. This inventory procedure is coordinated with priority programs such as the grazing environmental statement schedule to meet total program needs.

The Environmental Protection Agency, USGS, and state agencies will continue to be the principle source of water quality data. The BLM will identify what, where, and when data are needed, interpretation of these data and the development of data collection studies including actual data collection by BLM when necessary. Water quality of surface and subsurface water is inventoried to determine the effects of existing and proposed land uses on future water quality.

Air quality studies will be based on all existing data to determine the chemical and physical makeup of air within a few thousand feet of the earth's surface. Studies also include air movement; air temperature; how it affects the nature, characteristics and dynamics of soil and water; and how it relates to other BLM programs. These studies will be conducted on all program developments that will have a significant impact on existing or future air quality.



Literature research is conducted for endangered plant species suspected to exist on public land. The literature search provides information concerning known existence and extent of their habitat. Additional information may be found on habitat conditions and requirements to perpetuate the species. The literature search will have to be followed up by an on-the-ground inventory to substantiate the literature and determine present habitat conditions.

#### Activity Plans

Protecting, maintaining and enhancing watershed conditions are generally considered in other resource activity plans such as grazing management plans and wildlife habitat plans. Only those areas that require special watershed treatment practices and not covered under some other plan will have a watershed activity plan prepared. These would include critical watershed areas such as the San Simon Valley in southeastern Arizona, the Rio Puerco watershed in northwest New Mexico and the Upper Colorado River Basin in Wyoming, Utah, and Colorado. Endangered plant species will also be protected under other resource activity plans unless a specific plan is required.

Under the Environmental Policy Act, an environmental analysis is required for each project to assess the impacts. These impacts, within each activity plan, are analyzed individually or collectively as a unit. At that time it is determined if the project will have a significant impact on the environment to require an environmental statement. If an environmental statement is required, it is completed prior to construction and used as a tool in making a final decision to carry out the proposed action.

#### Implementing Activity Plans

Implementing activity plans requires construction or projects designed specifically for the benefit of a watershed, water quality and yield, or protection of endangered plant species. These projects may be included in one of the soil, water, and air plans or in other resource plans where protection or improvement is being provided for erosion, water, air or endangered plant species.

#### Project Maintenance

Developed projects require periodic inspection and maintenance to meet objectives and protect the investment. When a project is developed, a maintenance schedule is established and recorded in the job documentation record computer system. A maintenance schedule is provided to states routinely prior to the budget year for use in scheduling maintenance inspections and carrying out maintenance needs.



### Resource Monitoring

Once the base inventories have been completed for water quality, air quality, and erosion conditions, each is checked periodically to determine trends. Monitoring provides the information necessary to evaluate land uses and practices for determining their beneficial and adverse effects. This information supplements the data contained in the Bureau planning system which will revise or update land use decisions.

#### BUDGET AUTHORITY \$ Millions

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>4 Year Authorization Total</u>
Soil-Water-Air	11.2	17.1	18.8	21.1	26.9	83.9
Endangered Plants	<u>0.3</u>	<u>0.5</u>	<u>0.7</u>	<u>0.9</u>	<u>1.1</u>	<u>3.2</u>
Total	11.5	17.6	19.5	22.0	28.0	87.1

#### POSITIONS

Soil-Water-Air	262	382	388	395	420
Endangered Plants	<u>5</u>	<u>5</u>	<u>8</u>	<u>12</u>	<u>14</u>
Total	267	387	396	407	434

#### ACCOMPLISHMENTS WITH AUTHORIZATION

Millions of Acres Inventoried Each Year (Soil- Vegetation)	1.1	6.5	6.5	6.5	6.5
Water Quality Monitoring Sta- tions Installed Each Year	3	3	90	125	282
Air Quality Studies Completed Each Year	10	10	20	35	40
Millions of Acres of Watershed Improved Each Year	1.2	3.4	4.6	5.1	5.7



## FOUR YEAR AUTHORIZATION

### WILDLIFE MANAGEMENT

#### GOAL

The goal of the Bureau of Land Management's wildlife habitat management program is to provide sufficient fish and wildlife habitats for all species depending totally or partially on public lands for food and shelter.

#### BACKGROUND

Public lands have always provided habitat for many species of wildlife. Most of the public lands have low amounts of precipitation that restricts vegetative production. Because of this condition, these lands provided only seasonal forage for most of the larger game animals that would forage in the higher elevations during the summer. Nevertheless, these lands were an important link in perpetuating wildlife species. As the more productive areas were placed into private ownership, or other uses were made of important wildlife habitats, more reliance was placed on the public lands for total habitat requirements. Water developed for livestock helped to open up new areas that were unusable. Livestock became more abundant on the public lands and greater competition for forage was created. Since game laws were lacking and many wildlife species were diminishing because of uncontrolled hunting, forage competition was not severe. As the State agencies began to control hunting, wildlife populations began increasing. Increasing wildlife species placed greater stress on public land range conditions requiring a need for multiple use management. Wildlife management actually began with passage of the Taylor Grazing Act in 1934 requiring that forage be set aside for wildlife. The program now plays an equal role in the multiple use management of the public lands natural resources. BLM's primary role is managing the wildlife habitats while the States and other Federal agencies are responsible for population management. Because of habitat management responsibility, BLM acts in an advisory capacity, recommending the number of wildlife species that should inhabit a particular area on public lands.

Today, BLM administers the following estimated habitats:

377 million acres of big game habitat  
402 million acres of small game habitat  
93 million acres of water fowl habitat  
5.2 million acres of lakes and reservoirs  
270,000 miles of streams



These habitats provide for more than 5 million big game animals such as deer, bear, elk, bighorn sheep, mountain goat, and moose. They also provide habitat for countless numbers of lesser mammals, songbirds, upland game birds, water fowl and reptiles. Out of the hundreds of wildlife species that inhabit the United States, 178 are classified as threatened or endangered. Out of this number, 30 species are found on public lands.

#### PROGRAM ACTIVITIES

Activities for wildlife management have been directed toward the program goal. These activities and FY 1978 expenditures are:

<u>Resource Inventories</u>	<u>\$2,300,000</u>
This activity includes surveying approximately 7.2 million acres for the purpose of gathering basic wildlife data such as cover type, mapping, water location surveys and wildlife use area determinations.	
<u>Administration</u>	<u>\$2,000,000</u>
This activity includes purchasing equipment, renting office and storage space, and paying utilities. It provides for coordination of the wildlife program with other resource programs, responses to public requests, all clerical work, employee training, and wildlife reports.	
<u>Research and Studies</u>	<u>\$ 700,000</u>
This activity includes making 1,200 studies directed toward obtaining knowledge of certain wildlife species on a given habitat and carrying out 50 research studies undertaken cooperatively with other agencies or institutions.	
<u>Activity Plans</u>	<u>\$ 300,000</u>
This activity includes all work necessary for preparation, planning, and developing wildlife activity plans. In FY 1978, 12 plans will be developed.	
Wildlife habitat plans are developed in cooperation with State agencies on an area established to encompass the biological requirements of priority species. This plan includes all lands within that area regardless of land status or administrative responsibility. The plan considers the habitat requirements for, not only priority species but other species as well, and discusses:	
<ul style="list-style-type: none"><li>- Areas of critical environmental concern.</li><li>- Economic and recreational value.</li><li>- Susceptability to land use changes.</li><li>- Relationships between plants and animals.</li><li>- Management methods.</li><li>- Management evaluations and revisions.</li></ul>	



Each plan is developed in cooperation with the States and responsible agencies and establishes objectives, specific responsibilities for management, and project development and maintenance.

This activity also includes conducting, evaluating and revising 110 resource studies; and making field checks; and evaluating and updating 21 existing wildlife habitat plans.

<u>Project Development and Maintenance</u>	<u>\$1,100,000</u>
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This activity includes planning and developing projects for the protection, maintenance or enhancement of wildlife habitats. During FY 1978, 4,000 acres of habitat improvement and expansion are planned; 10 miles of stream fish habitat will be improved; 98 miles of protection fence will be established; 65 water development projects completed; and 11 cattleguards and antelope passes installed. The maintenance program includes maintaining 42 miles of fence, 117 water developments, and all tools and equipment used primarily to benefit the wildlife program.

This activity also includes developing environmental statements (none being prepared at this time) preparing an average of 130 environmental analysis and reviewing 9 environmental statements prepared by other agencies.

#### SITUATION

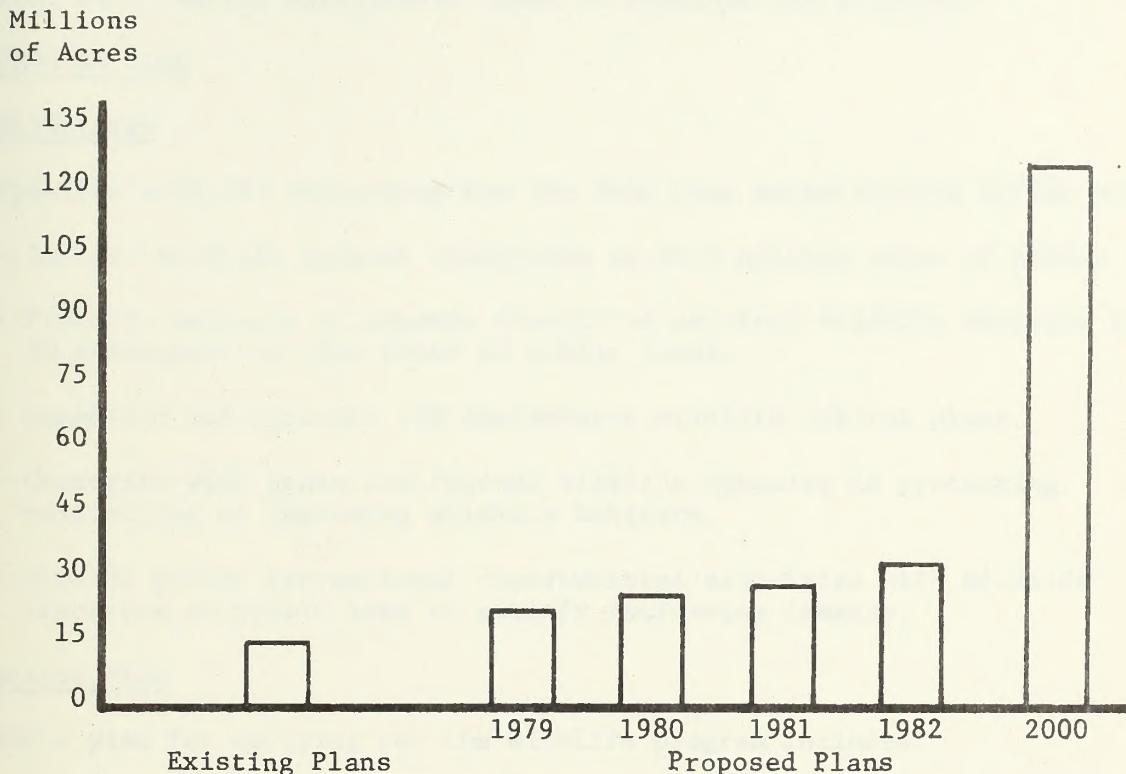
Wildlife habitat management needs and responsibilities within the BLM have increased rapidly as a result of population growth and increased demands for natural resources. Approximately 20 percent of all big game species in the United States is found on the public lands. This includes nearly all of the caribou, grizzlies and desert bighorn sheep, 80 percent of the moose, 65 percent of the mule deer and 45 percent of the antelope. At present management levels, it is estimated by the year 2000 that there will be 7 percent less antelope, 8 percent less bighorns and 16 percent less elk.

The Western States are concerned about the declining trend in wildlife habitats which is directly affecting the wildlife populations. Montana reported that their resident pheasant population has decreased as much as 98 percent in the northeastern region between 1950 and 1970. Other states have reported extreme declining populations of deer, bighorn sheep and others. BLM cannot compensate for the losses caused by declining habitats on private lands, but can stabilize, improve, and develop habitats on public lands.



Some 1,400 wildlife habitat plans for terrestrial and aquatic habitats have been identified for proper wildlife management. Currently, 152 plans have been implemented for various wildlife habitat protection, enhancement or development. Projected needs are shown on the following chart.

## Wildlife Habitat Management Plans



Wildlife management includes both the habitat and the animals. Since one cannot be properly managed without the other, BLM has entered into cooperative agreements with 14 western states that have the primary responsibility for animal management. These States include: Alaska, Arizona, California, Colorado, Idaho, Oregon, Montana, Nevada, New Mexico, North Dakota, Utah, Washington, South Dakota, and Wyoming. Priority management species are identified for each state and the resources of all agencies involved are directed toward accomplishing the objectives set for those species.

Passage of the Sikes Act (P.L. 93-452) in 1974 has revitalized cooperation between all wildlife agencies, which has resulted in a more complete management effort.



Rangeland developments over the past 60 to 70 years were generally developed without full knowledge of the impacts on wildlife. These include fences, seedings, reservoirs, spring developments, roads, etc. As more knowledge was gained about wildlife requirements, many of the existing projects were found to have adverse effects on migration routes, shelter and food. Modification of these projects is presently considered a high priority item that will require substantial input to complete the program.

#### PROGRAM PLAN

##### Objectives

Specific wildlife objectives for the four year authorization period are:

- Improve wildlife habitat conditions on 15.5 million acres of public lands.
- Protect, maintain or enhance identified critical wildlife habitats for 30 endangered species found on public lands.
- Supervise and evaluate 228 implemented wildlife habitat plans.
- Cooperate with State and Federal wildlife agencies in protecting, maintaining or improving wildlife habitats.
- Provide public recreational opportunities associated with wildlife resources on public land to satisfy increasing demands.

##### Action Plan

BLM's plan for carrying out the wildlife program includes:

- Conducting inventories that will provide adequate information for making sound land use decisions.
- Preparing wildlife habitat management plans including environmental analysis.
- Implementing wildlife habitat management plans including supervision and evaluation.
- Cooperating with State and Federal wildlife agencies.



## Wildlife Inventories

Inventories are coordinated with all other resource programs and Federal and State Agencies to eliminate duplication of effort and ensure adequacy for full consideration in land use planning. Since all BLM administered lands are fish and/or wildlife habitat, these lands require inventories that will consider all wildlife species. The inventory procedure provides:

1. Basic data for use in all BLM reports.
2. Conditions and trends of wildlife habitats.
3. Verification and/or prediction of occurrence and distribution of species within a particular area.
4. Prediction and analysis impacts of land development on the wildlife resource.
5. Delineation of big game crucial areas and estimates of their carrying capacities.
6. Factors limiting wildlife population expansion.
7. Analysis of ecological information to determine new ecological inter-relationships.
8. Analysis of biological and temporal aspects of plants and animal succession.

Changing conditions require recurring inventories on a regular basis to determine current conditions and trends. The basic inventory provides general information that will have to be added to in more detail for special programs or project development.

When the inventories are completed, this information is analyzed on a planning unit basis (a geographical area within a BLM District used as a boundary for gathering resource data and initiating land use planning) considering full resource potential and resolving conflicts with other uses through compromise. The compromise provides the recommendations for land use planning decision for multiple use management. When the broad program direction has been established, wildlife habitat management plans are prepared under those guidelines.



### Wildlife Habitat Management Plans

When the land use planning decisions have been completed and a specific geographic area is established for preparation of a habitat management plan, a detailed analysis is prepared on that area. Since detailed inventories necessary for proper analysis have not been completed, these inventories are completed at this time. The analysis is used as the basis for preparing the habitat management plan. Habitat management plans are prepared in cooperation with the States and those Federal agencies involved. The plan establishes specific management objectives and a plan of action for managing the wildlife habitat and species involved. An environmental assessment is prepared on recommendations presented in the habitat analysis. Mitigating measure for adverse environmental impacts are discussed at this point and the information used in preparing the wildlife habitat management plan. This assessment also recommends whether or not an environmental statement should be prepared prior to implementing the habitat management plan.

### Implementing Wildlife Habitat Management Plans

When the plans are cleared for environmental considerations and approved by the cooperating agencies, the plans are implemented. This includes scheduling project development, which is shared by the cooperators, developing outlined control measures, introducing new species if applicable, establishing necessary studies, and modifying existing projects and uses to meet the objectives. When the habitat plans are implemented, wildlife studies including habitat condition trends, population trends, forage utilization and others are necessary to evaluate the plans. These studies are conducted on a regular basis for evaluating the applied management techniques to see if the objectives are being reached. Each habitat plan is supervised to see that management controls and schedules are being followed. Habitat inspections are conducted to detect possible problems and determine changes that may be required to meet the objectives.

### Cooperation and Coordination

BLM cooperates with the State agencies in recommending hunting seasons and numbers of animals that should be removed each year. This involvement is generally restricted to those wildlife species that are dependent partially or totally on those habitats found on public lands.

The Endangered Species Act of 1973 directs the Secretaries of Interior and Commerce to protect and restore endangered and threatened species and their habitats. In the Department of Interior, the Fish and Wildlife Service has been given the lead responsibility for overall coordination implementation. However, protection and restoration of an endangered and threatened species and its habitat is the responsibility of each Federal agency. To meet these requirements, recovery plans are developed which include:



1. the animals habitat requirements, population and status;
2. plan of action, and;
3. implementation.

Since 30 endangered and threatened species are found on public lands, BLM participates in providing a team member for each recovery team where some or all of the habitat is found on public land.

BUDGET AUTHORITY  
(\$ Millions)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>4 Year Authorization Total</u>
Wildlife	6.4	9.9	10.9	13.0	17.0	50.8

Positions

Wildlife	117	133	171	209	247
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Accomplishments with Authorization

Millions of Acres Inventoried each Year	7.6	9.5	9.8	9.6	11.4
Millions of Acres Under Management	15.5	18.5	21.5	25.5	31.0
Number of Endangered Species Protected	30	30	30	30	30



## FOUR YEAR AUTHORIZATION

### FIRE MANAGEMENT

#### GOALS

The Bureau of Land Management's fire program includes two major goals. The first and primary goal is to protect natural resources and other values from loss or depletion due to wildfire. The second goal is to develop fire techniques as a tool for resource management.

#### BACKGROUND

Wildfire has always been feared by both man and animal. It was, however, used by the American Indian as a tool in hunting, natural habitat improvement and warfare. Fire has been used as a means to clear lands by early settlers and until as late as the 1960's to remove brush and trees from rangeland. This practice was repeated once every several years to allow the growth of more desirable livestock forage such as grass and browse. Fire would rapidly improve conditions for livestock grazing and wildlife habitat conditions in chapparral vegetative types by increasing fertility and making precipitation more available to the desired forage species. As more knowledge was learned about natural resources it was found that many of the periodically man-caused fires were having an adverse effect on both the watershed and many wildlife habitats. Therefore, the practice of uncontrolled man-caused fires for improved forage conditions was stopped.

Until natural resource values were realized, many of the wildfires in Alaska and remote areas in the Lower 48 States were allowed to burn themselves out. Increased use, development, and resource values have demanded fire control in even the most remote areas where resource values can be lost or depleted.

Fire protection has stopped many natural wildfires and restricted others to far less acreage than could normally be expected without firefighting efforts. This has resulted in a buildup of combustable fuels in many areas that were consumed periodically by recurring natural wildfires. Because of this buildup, a fire that occurred in these areas was more intense causing greater damage than what resulted under natural conditions. It was learned that fire played an important role in the natural perpetuation of vegetative species such as the giant redwoods and other forest trees. Many of the forest trees are naturally fire resistant, but require periodic ground fires to eliminate the competitive undergrowth.

Today, all destructive wildfires are manned for control and only allowed to burn if the benefits outweigh adverse impacts. Prescription fires are being used as a management tool in resource development and for presuppression of potential, destructive wildfires.



BLM has the responsibility to protect some 402 million acres from fire. Of this total approximately 6 million acres are protected through contracts with State, private or Federal fire protection agencies.

In addition to public lands, BLM cooperates with other Federal land management agencies. Under the Alaska Native Claims Settlement Act, BLM is charged with fire protection on these lands amounting to 44 million acres for an undetermined time.

This includes an amount of \$4,750,000 for firefighting and rehabilitation in the Management of Lands and Resources appropriation. This amount and effort is exempt from the four year authorization requirements of Sec. 318 of the Federal Land Policy and Management Act. Every year the amount for firefighting is the subject of a supplemental appropriation due to higher, unpredictable costs. BLM's fire program is divided into two categories: fire management and firefighting and rehabilitation.

#### PROGRAM ACTIVITIES

The following program activities show the fire management program for FY 1978 and average firefighting and rehabilitation data for the period 1971 - 1976.

#### Fire Management

<u>Administration</u>	\$3,000,000
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This activity includes purchasing equipment, renting office and storage space, and paying utilities. It also provides for program coordination with BLM programs, all clerical work, public information and education, and general inquiries and reports.

<u>Training</u>	\$1,000,000
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This includes training oriented toward the fire protection program such as overhead training for specific firefighting positions, weather behavior, etc.

<u>Fire Operation</u>	\$3,000,000
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This activity includes such items as fire detection and patrol, fire preparedness, dispatching, fire analysis, gathering weather data and contract protection services.



Project Development and Maintenance

\$1,300,000

This activity includes construction of fuel breaks by plowing and seeding, slash reduction, prescribed burning projects, etc. This activity also involves preparation of some 14 environmental analyses on proposed presuppression projects. This also includes the maintenance of all equipment, tools, and supplies used primarily for the program.

Firefighting and Rehabilitation (not subject to authorization)

This includes training emergency firefighting crews, actual fire suppression activities, and rehabilitating those areas where land treatment is required to protect against further resource loss. During the fiscal years between 1972 and 1976 fire suppression costs averaged \$24.1 million.

SITUATION

Fire damage to timber, watersheds, recreation, range, wildlife habitats, property and other resources amounts to millions of dollars each year. Fire damages since 1966 have ranged from 2 to 61 million dollars depending upon the acres burned and the values involved during each of these years.

## Acres Burned and Damages Occurred Between 1966-1975

<u>Year</u>	<u>Acres Burned</u>	<u>(\$ Thousands)</u> <u>Resource Damage</u>
1966	1,079,000	\$ 16,175
1967	271,000	1,295
1968	1,082,000	6,151
1969	4,271,000	61,038
1970	335,000	2,027
1971	1,491,000	24,980
1972	1,051,000	17,554
1973	726,000	11,513
1974	1,088,000	15,676
1975	152,000	15,726
Total	11,546,000	\$172,134

On a ten year average, 2,100 fires occur each year varying in size from less than one acre to several hundred thousand acres. Fire occurrence cannot be accurately predicted. Conditions that are more conducive to fire such as lightning storms, heavy fuel buildup and high use areas can be monitored to provide information concerning fire probability. Fire readiness has reduced resource damage by close observation of high probability areas and quick action on reported fires.



As resource values increase, fire damage will increase placing greater emphasis on rapid fire detection and suppression. This is becoming an ever increasing task because of increased people caused fires. During the past 10 years, fires caused by accident or carelessness of people have increased by 25 percent. This will steadily increase as more use is made of natural resources. Fire prevention through public awareness such as the Smoky Bear fire prevention program will have to be continued to remind people of fire hazards and damages. Other presuppression activities such as improved fire weather forecasting, early detection, improved firefighting methods and equipment, and fire break construction will have to be continued to meet increasing demands.

Training is a necessary function in firefighting activities. Lack of training can result in loss of life or serious avoidable accidents and increased resource damage. Well trained firefighting crews require knowledge of new equipment and firefighting procedures as well as refresher courses in firefighting and management programs. In addition to training fire crews and administrators for the BLM fire program, BLM also plays a lead role in training all Department of Interior agencies in firefighting and management.

Studies and research show that fire can, and in many areas must, play a role in resource management. Using fire to improve timber growth and remove undesirable vegetation is a useful tool, however, fire management technology has not progressed to provide optimum use of fire. Prescribed, controlled burns have resulted in improving range and watershed conditions superior to those accomplished through mechanical methods. This has not been the result in all cases because of the lack of knowledge in using fire as a management tool. Improving fire management technology will reduce rangeland and timber stand improvement costs and provide longer lasting results. The Smokey Bear campaign has thoroughly educated the public to fire prevention and suppression. This image will have to be changed to provide the support and recognition of fire as a resource tool.

Fire does not always result in permanent loss of resources, but in some instances where conditions are right, permanent losses in soil and wildlife habitat have occurred. Without early evaluation of wildfire burns to determine rehabilitation needs thousands of cubic yards of soil will be lost each year. Areas with greater than 15 inches of annual precipitation are the most susceptible to accelerated erosion when vegetative cover is completely removed by wildfire. Rapidly growing vegetation and water control structures are required in these areas immediately after the fire to allow protection and reduce soil loss. Without this protection, reproduction capabilities could be lost with the removal of productive soils and natural vegetative seed sources.



Fire destroys timber stands, wildlife habitat, livestock forage, and developments. Wildfires are so intense that they will trap both livestock and wildlife, consuming large numbers in concentrated areas. The immediate destruction has adverse effects on critical winter habitat for wildlife species and forage for dependent livestock operations. Indirect losses are generally greater than those directly affected. This is found in permanent loss of soil that has been left unprotected to wind and water erosion. Loss of soil reduces productivity of the land which reduces its capability to provide timber, livestock forage and wildlife habitats. Annual burns amount to less than 1% of the total acres administered by BLM, but over a period of year can make up a substantial part of these acres. During the past 40 years billions of dollars have been lost due to a loss of production potential.

Preventing the destruction of wildfires requires improved capabilities in fire prevention techniques, rapid fire detection methods, well trained fire-fighting personnel, modern equipment, adequate plans for efficient, effective fire suppression, and proper rehabilitation. Greater dependency upon the public land and its resources requires maximum protection from wildfire losses to meet the needs of the American people.

#### PROGRAM PLAN

##### Objectives

- Support and fulfill BLM's resource management programs through providing for adequate protection from wildfire.
- Use prescribed fire techniques to achieve resource management objectives.
- Develop fire prevention and suppression methods to reduce the possibility of disastrous wildfires.
- Accurately identify rehabilitation needs and treatment methods to reduce the loss of resource production.

##### Action Plan

BLM's plan for carrying out the fire management and firefighting and rehabilitation program follows:

- Gather adequate resource information to fully consider fire prevention and management in the Bureau planning system.
- Fully integrate fire management in land use plans.
- Develop and implement normal fire year plans.
- Train all personnel involved in fire for efficient and effective results.
- Fight wildfire.
- Rehabilitate burns to reduce loss in resource reproduction.
- Maintain equipment, facilities, and projects.



## Inventory

Most of the information necessary to analyze the fire situation for planning purposes is included in other resource inventories such as range, watershed, wildlife, timber, and recreation. Only in special cases will additional information be required. This may include weather patterns, normal fire occurrence, value of resources at risk to loss by fire, potential fire break location, etc.

## Land Use Planning

All information is analyzed as a fire function or support for developing land use decisions. At this point decisions are made concerning areas that will require immediate and total fire suppression, minimum or no suppression once a fire occurs.

## Normal Fire Year Plans

When the broad management decisions have been made, normal fire year plans are developed for an administrative unit. These plans include:

1. Resource values.
2. Soil erosion potential.
3. Fuel types.
4. Risks and hazards.
5. Water supply.
6. Topography.
7. Land status.
8. Transportation, aircraft, and communication facilities.
9. Contracts and cooperative agreements.
10. Present fire control capability.

Once these plans have been developed they are updated each year to reflect changes and current conditions.

## Training

Training is a major and important part of fire management and suppression. This includes the training of temporary emergency firefighting crews and all overhead from State Offices, District Offices, and the Boise Interagency Fire Center. Approximately 80 man-months of training are required each year to maintain current capability.

## Project Development

As determined through the planning process, projects for fire control and access are developed. This includes constructing fire breaks, vegetative conversion to reduce fire spread rate, slash disposal and other projects expressly designed to prevent or reduce wildfires.



## Fighting Wildfires

When a wildfire has been reported, a reconnaissance is made of the area and the initial attack crew dispatched to the site. Operations are immediately set up to support firefighters and provide backup if additional needs are required. Firefighting is carried out in several different operations. An initial attack is made to contain the fire. Once it is contained and controlled, the mop up operation is started to ensure that the fire is out and has no capability for flare up. All during the fire and especially during mop up operations, some rehabilitation measures are taken. These include cleanup, water barring fire lines, protecting trails and roads, and some immediate repairs of damaged facilities caused by fire or control measures. After the fire has been declared out, an evaluation is made of the burn characteristics, use of equipment and personnel, support functions and all other firefighting operations.

## Burn Rehabilitation

Immediately after the burn, an inspection is made to determine what measures, if any, are required to protect soil loss from wind and water erosion. Areas where average precipitation is less than 8 inches annually are not suited for seeding or planting and may only require water control structures to protect uncovered soils. Areas having annual precipitation exceeding 15 inches annually are generally the most susceptible to reproduction loss through erosion. These are seeded or planted to take advantage of fall, winter, and spring moisture. Since 1973, approximately 10 percent of the total acreage burned has required some seeding or planting.

When it is determined that some rehabilitation measures are required, a rehabilitation plan is developed. The plan includes:

1. Background information.
2. Evaluation of damages and hazards.
3. Rehabilitation needs and objectives
4. Environmental considerations.
5. A detailed cost of the proposals.

The plan is given high priority to ensure early development and approval to expedite needed rehabilitation measures.

## Maintenance

Tools and equipment are maintained continually through the fire year. After each fire all tools and equipment are repaired, sharpened, and stored or packaged for reliable use on the next fire. The Boise Interagency Fire Center provides support to all BLM offices. Support includes equipment, tools, and personnel when requested. The tools and equipment that are returned are repaired, replaced, repacked, and stored for future use. This process requires a year round operation for quality service in emergency situations.



BUDGET AUTHORITY

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>4-Year Authorization Total</u>
Fire Management	\$ 8.3	\$12.0	\$15.6	\$18.0	\$22.0	\$67.6
Firefighting and Rehabilitation <u>1/</u>	(4.8)	(4.8)	(4.8)	(4.8)	(4.8)	

1/ Since firefighting and rehabilitation expenditures are based on fire occurrence that vary from year to year, this is the minimum amount necessary to initiate emergency actions. Total firefighting and rehabilitation expenditures will be requested through supplemental appropriations. These expenditures are not subject to the 4 year authorization requirements of Sec. 318 of the Federal Land Policy and Management Act.

Positions

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Fire Management	207	222	237	252	252
Firefighting and Rehabilitation <u>2/</u>	-0-	-0-	-0-	-0-	-0-

2/ Fire management provides the positions necessary to support all firefighting and rehabilitation activities.

Accomplishments with Authorization  
(Based on Ten Year Averages)

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Average acres burned each year (thousands)	1,200	1,100	1,000	900	900
Average resource damage each year (\$ thousands)	14,900	13,400	12,100	10,900	10,900
Average suppression costs each year (\$ thousands)	24,100	22,800	21,300	19,900	19,500



PLANNING & DATA  
MANAGEMENT



## FOUR YEAR AUTHORIZATION

### PLANNING FOR MULTIPLE USE

#### GOALS

The Bureau of Land Management's Planning for Multiple Use Program provides guidance and decisions on single land uses or combinations of uses on 180 million acres of public land, and on reserved mineral rights for several million additional acres of public lands throughout the country.

Land use plans have been completed on 80% of these lands, which provide on-the-ground guidance and constraints for coordination between each category of public land use. The categories include:

- mineral exploration, development and production.
- intensive land use for commercial, agricultural, industrial, urban, rights-of-way, and other public purposes.
- production of timber or other vegetative products.
- domestic livestock and wild horse and burro management.
- water production and water quality modification.
- wildlife habitat preservation and production.
- preparation and/or use of cultural and historic resources, scenic and wilderness values and other outdoor recreation opportunities.

Basic guidance for development of mineral and other resources in several other states including Alaska will also be available through the Bureau's Planning System.

The planning activity additionally serves to meet numerous legislative requirements including:

- Federal Land Policy and Management Act. (FLPMA)
- National Environmental Policy Act.
- Federal Coal Leasing Amendments Act.
- Surface Mining and Reclamation Act.
- National Petroleum Reserve Production Act.
- Numerous Acts dealing with environmental protection, including clean air, clean water, endangered species, historic preservation, wild horse and burros, wild and scenic rivers, wilderness and others.



## BACKGROUND

The Bureau's formal land use planning program was initiated in 1967 in recognition of the need to evaluate competing uses of the public land acreage - much of it intermingled with land under private or other forms of public ownership.

Prior to the FLPMA, BLM's multiple use planning program had been carried on under Departmental authority which authorizes the Director to use such management techniques and tools as are necessary to guide and coordinate the specific land management programs for which he is responsible. This authority was buttressed by the National Environmental Policy Act which requires use of a "systematic interdisciplinary approach in planning". Recent legislation added impetus to planning efforts. Public Law 94-377, an Act "to amend the Mineral Leasing Act of 1920 and for other purposes" requires any coal lease underlying Federal surface to be based on a comprehensive land use plan and directs the Secretary to prepare plans for lands under his jurisdiction. In addition, the Federal Land Policy and Management Act (P.L. 94-579) requires preparation of land use plans.

## PROGRAM ACTIVITIES

BLM's activities have been oriented toward the broad program goals. These activities and FY 1978 budget are:

- <u>Unit Resource Analysis (URA)</u>	\$5,313,000
Includes data compilation and summarizations, and preparation of narratives, tables, maps, and overlays as required for a geographic area (planning unit) for all of the seven basic resources found on that area. Present uses are described in the URA, and each resource is described to its full technical and economical capability. In 1978 this activity will result in approximately 80 such analyses (URA's).	
- <u>Management Framework Plans (MFP)</u>	\$2,103,000
Includes developing each specific program portion of the land use plan (MFP) from an analysis of the data presented in the URA. Also included is a Planning Area Analysis (PAA). It analyzes social, economic, environmental, and institutional values of resources within the land use planning area.	



A Social Economic Profile (SEP) contains a description of social and economic factors, area infrastructure and Bureau relationships with other governmental agencies, user and environmental groups and the public.

The final plan then develops and recommends single uses or combinations of uses for the specific geographic areas. Public participation and information is gathered throughout the process and public meetings are held before land use decisions are incorporated into the approved land use plan.

The Federal Land Policy Act charges the Bureau Planning System to provide the Secretary detailed information on public land resources and to achieve integrated consideration of physical, biological, economic and environmental sciences in the management of public lands. Section 202 of this Act further requires the Secretary to coordinate the land use planning with other Federal departments and agencies and with the states and local governments. Development of programs, regulations and decisions must be consistent with state and local plans and state authorities are authorized to furnish advice to the Secretary in regards to BLM planning under this Act.

These comprehensive detailed land use plans are proposed to be completed or undergo major revision for 46 areas in 1978 covering approximately 18 million acres.

- California Desert Conservation Area \$2,000,000

The Secretary, in accordance with Section 601 of the Federal Land Policy and Management Act, shall prepare and implement a comprehensive, long range plan for the California Desert Conservation Area on or before September 30, 1980.

Preparation of a plan for this 12 million acre area will incorporate the same requirements (Section 202 of FLPMA) presently in use for all of the public lands. The estimated funding for this plan is shown as a separate cost item in order to identify costs associated with this special authority.

- National Petroleum Reserve - Alaska \$2,755,000

Preparation of a land use plan for this 23 million acre petroleum reserve is not a separate activity in terms of cost accounting or procedures. However, funding was received as a supplemental to the Bureau's FY 1977 budget and the full amount is shown here to separate this cost item from other Planning for Multiple Use funds. Of the total amount, \$1,700,000 is contract costs to other agencies and to private companies.

Total \$12,171,000



## SITUATION

The area that BLM manages has been subdivided into 600 "planning units". These are basic compartments or geographic areas used to record inventory data and develop Management Framework Plans. At the end of FY 1977, approximately 372 of these units were covered by completed Management Framework Plans. These land use plans cover 80% of the public land in the western states. Plans have not been completed as yet for the remaining western public lands, lands in Alaska or small scattered areas of public lands in other states.

These plans need periodic revision as policies and data evolve. Current funding is sufficient only to revise existing plans on an eight year cycle. This is thought to be too lengthy of a cycle considering the demand for use of public resources, new legislation, new planning requirements and the dynamic western situation.

## PROGRAM PLAN

### Objectives

Specific objectives for the 4 year authorization period are:

- increase the current 8 year schedule for updating and revising Management Framework Plans to a 6 year schedule and complete land use plans for public lands not currently embraced by such plans.
- complete a comprehensive long term plan for the California Desert Conservation area containing 12 million acres of public land in southern California by September 30, 1980.
- prepare a land use study of the National Petroleum Reserve in Alaska containing 23 million acres on the North Slope oil province by April, 1979.

### Action Plan

BLM's plan for carrying out the legislated planning requirements include:

#### California Desert Conservation Area Plan

Contracts to gather inventory data were initiated in FY 1977 with program funds redirected from other activities. This effort was accelerated and will be continued at the same level in FY 1978 in order to have the data available for analysis by the end of FY 1978. Plan preparation will require 2 years and will be completed by September 30, 1980, as shown in the following schedule:

FY 1977	FY 1978	FY 1979	FY 1980
Contracts for Inventory Data (18 month Contracts)			
	Analysis & Land Use Allocations		
	Obtain Full Public Participation (Dec. 77 Advisory Board Established)		
		Final Plan for Implementation (Prepare Env. Report)	



### National Petroleum Reserve in Alaska (NPR-A)

This effort will produce a land use study including identification of values and recommendations of land and resource uses in the National Petroleum Reserve - Alaska (NPR-A). A full report on this 23 million acre reserve is due to Congress in April, 1979, as mandated by the Naval Petroleum Reserve Production Act of 1976.

Gaps in existing data have been identified and are being acquired by contracts. The process is as follows:

- data collection.
- resource development and preservation opportunities will be analyzed.
- conflicts will be identified and recommendation made between competing uses.
- public meetings will be held.
- final recommendations will be prepared and presented to Congress.

The study includes participation by BLM, BIA, NPS, FWS, USGS, BM, and BOR. Funds also allow for participation by the State of Alaska, the Native community, the University of Alaska and private contractors.

### Management Framework Plans (MFP)

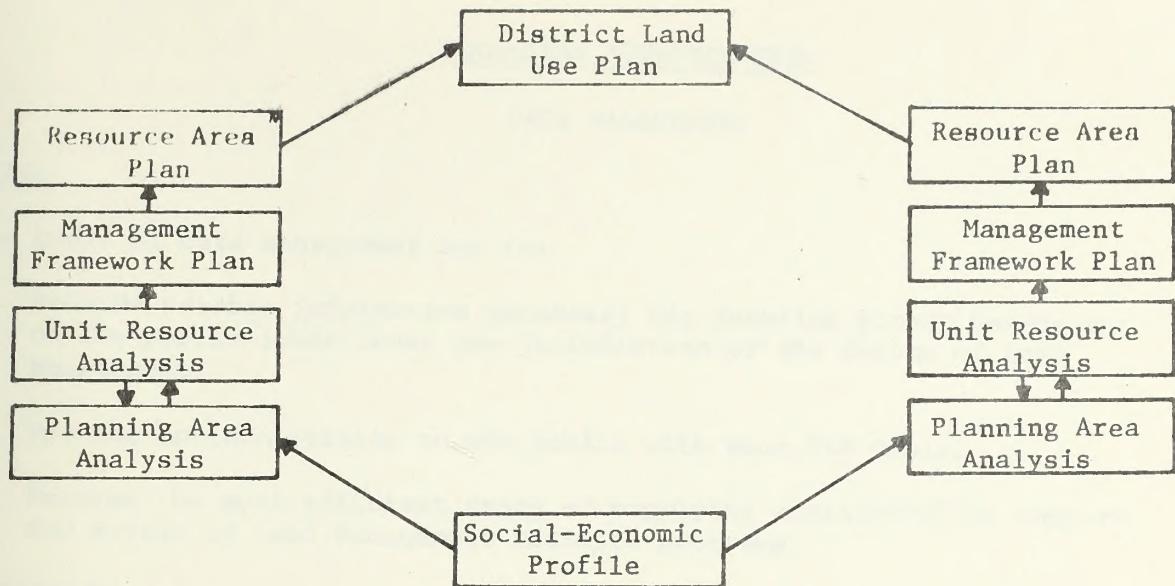
Land use planning would be increased under the proposal to initiate an approximate 6 year update/revision cycle needed to meet requirements in the Federal Land Policy and Management Act and to meet environmental reporting requirements including court ordered Environmental Impact Statements. The specific requirements are:

- wilderness review within 15 years (55 areas must be reported within 2 years)
- withdrawal review within 15 years
- forestry environmental statement schedule within 6 years
- range environmental statement schedule within 12 years.

In addition, state governments are preparing or implementing plans to comply with Federal legislation on land use, reclamation, recreation, clean air, clean water, etc., thereby triggering a FLPMA requirement that BLM plans be revised and in concert with state requirements.

Each plan is comprised of several components which are prepared in advance of major land use decisions. These components as shown below incorporate the data and analyses needed to make reliable planning decisions that meet various legislative and court ordered requirements in a timely manner.





\$ Millions

	1978	1979	1980	1981	1982	4-Year Authorization Total
Planning for Multiple Use	7.4	9.9	9.9	9.9	9.9	\$39.6
California Desert	2.0	2.0	1.0	1.0	1.0	\$ 5.0
Petroleum Reserve	2.8	0.9	-0-	-0-	-0-	\$ 0.9
Total	12.2	12.8	10.9	10.9	10.9	\$45.5

Positions

	1978	1979	1980	1981	1982
Planning for Multiple Use	255	320	320	320	320
California Desert	20	20	20	20	20
Petroleum Reserve	30	30	-0-	-0-	-0-
Total	305	370	340	340	340

Accomplishments with Authorization

	1978	1979	1980	1981	1982
Complete Remaining MFP's	36	32	-0-	-0-	-0-
Major Revision MFP's	10	30	52	52	52
MFP Updates	-0-	-0-	22	22	22
Total	46	62	74	74	74



## FOUR-YEAR AUTHORIZATION

### DATA MANAGEMENT

#### GOALS

The goals of data management are to:

1. Provide useable information necessary for insuring proper management of the public lands under the jurisdiction of the Bureau of Land Management.
2. Provide optimum service to the public with whom BLM deals.
3. Provide the most efficient means of supplying administrative support for Bureau of Land Management Resource programs.

#### BACKGROUND

Until recently, automated data processing capability in BLM has been largely limited to operations of administrative systems, i.e., payroll, accounting, and billings. In the last decade, however, the need has been seen to expand this capability to the resource programs which are the basis of BLM's management of the public lands. Passage of the Federal Land Policy and Management Act (Public Law 94-579) has provided a comprehensive multiple use charter for the public lands. It places a legislative mandate behind BLM's land use planning system which has been developing since 1969 in recognition of the need to evaluate competing use of the public land acreage.

In 1974, BLM initiated a study to determine its data management requirements. This study resulted in a plan that provides a framework for the development of integrated manual and automated systems for gathering, storing, processing and retrieving vast amounts of resource and other data. The plan is called the "Strategic Plan for Information Systems Management". Preliminary work implementing the plan began in FY 1976. Given adequate resources, full implementation of the plan should be achieved by 1983.

#### PROGRAM ACTIVITIES

Activities are currently directed to implementation of the strategic plan and operation and maintenance of existing systems. In FY 1978, they are:

- Equipment Acquisition	\$1,235,000
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Equipment, including computers, telecommunication, and remote sensing devices will be acquired on a phased basis. A modern computer has been approved to replace the existing obsolete one in BLM's Denver Service Center. Computers will be located at each State Office. Total equipment cost necessary for implementation of the strategic plan is approximately \$10 million spread over the 7 year implementation period.



- System Operation and Maintenance \$8,606,000

This activity concerns those systems that have been installed and are in use. Currently only administrative systems are in use. The remaining steps given below, involve creation of new systems handle resource data and to upgrade existing systems according to the strategic plan.

- Detailed Requirements Definition (DRD) \$400,000

This is the first step in creating a new system. The detailed requirements of what the system is supposed to do are determined. Examples are: input format and content; output format and content; location and, distribution of users, amount of data, and frequency of use.

- Systems Design \$1,285,000

The DRD is broken into a series of logical processing steps that will define how the system accomplishes the requirements of the DRD.

- System Development \$690,000

This activity includes writing programs that meet design criteria and testing components individually and as they interact with each other.

- Acceptance Testing \$400,000

This involves testing a system with the user to insure that the technical and professional requirements of the user are met.

- System Implementation \$-0-

Placing the system into operation.

FY 1978 Total \$12,616,000

#### SITUATION

Resource management, in the present social and political climate, rests on a foundation of knowledge comprised of data and information documented in a variety of formats. Legal, scientific, and managerial data may be recorded on paper, text, photographs, maps, plats, digital tapes or electronic imagery. It is estimated that located in BLM files are 84 million individual records, each containing many data elements ranging from one to several thousand items. As a result of the broad geographic area of Bureau responsibility and operations, these records are stored at 120 separate locations across the continental United States.

Existing data processing capability exists at BLM's Denver Service Center and at the Oregon and Alaska State Offices. Most of the capability is located at Denver where a basic ADP organization exists. Existing administrative systems are run on an obsolete B-5500 computer which will be replaced in FY 1978.



Pilot projects involving automation of Lands and Minerals Ownership Records and basic resources information are currently underway in Alaska and Oregon. These test projects utilize limited non-Bureau processing capability. The Alaska project has proven benefits associated with processing Alaska Native Claims Settlement Act applications. The Oregon test has proven the feasibility of applying computer graphics technology to field office operations. The results obtained and knowledge gained during these pilot projects will find immediate applications in the first 3 packages listed in the "Action Plan."

## PROGRAM PLAN

### Objectives

Specific objectives for the four-year authorization are:

- Implement 14 application packages on a phased basis.
- Acquire necessary equipment at 12 state offices and 56 district offices.

### Action Plan

Under the strategic plan, BLM's workload has been divided into 14 district components called application packages. Systems will be designed and implemented on a phased basis for each application package. The packages are:

- Resource Inventory	- Regional Analysis
- Planning Unit Resource Analysis	- EAR/EIS Preparation
- Land Records Management	- Annual Work Planning and Program Management
- Case Management	- Accounting and Fund Control
- Utilization Management	- Payroll
- Planning-Management Framework Plan	- Manpower and Organization Management
- Planning	- Property Control

Implementation of the plan employs an orderly approach involving sequential action as illustrated by the following steps:

Action	Result
Strategic Plan	Provide guidance and control
Detailed Requirements Definition (DRD)	Defines "what" the system must do.
System Design	Describes how the system must be built to do the "what."
System Development	Build the system according to design specifications.
Acceptance Testing	Test by users to insure acceptance and utility.



Action	Result
Bureau-wide Implementation	System placed in operations, made available to users.
Operation and Maintenance	Maintain systems capability and utility.
Packages are implemented using the "building block concept". Each package when implemented will provide a segment of functional utility in BLM. No subsequent packages are necessary for its full implementation. However, the data base associated with each package is also available for use in subsequent packages.	

BUDGET AUTHORITY  
\$Millions

						4-Year Authorization
	1978	1979	1980	1981	1982	Total
Data Management	\$12.6	\$17.0	\$19.0	\$22.3	\$19.5	\$77.8

Positions

Data Management	167	197	197	197	197
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Accomplishments with Authorization

Packages implemented	3	3	4	4	14
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<u>Action</u>	<u>Result</u>
Bureau-wide Implementation	System placed in operations, made available to users.
Operation and Maintenance	Maintain systems capability and utility.
Packages are implemented using the "building block concept". Each package when implemented will provide a segment of functional utility in BLM. No subsequent packages are necessary for its full implementation. However, the data base associated with each package is also available for use in subsequent packages.	

**BUDGET AUTHORITY**  
\$Millions

	4-Year Authorization					
	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>Total</u>
Data Management	\$12.6	\$17.0	\$19.0	\$22.3	\$19.5	\$77.8

Positions

Data Management	167	197	197	197	197
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Accomplishments with Authorization

Packages implemented	3	3	4	4	14
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## FOUR YEAR AUTHORIZATION

### CADASTRAL SURVEY

#### GOAL

The primary goal of the Bureau of Land Management's Cadastral Survey program is to provide timely identification of public land boundaries from which legal property descriptions are derived. This is mandated by law. The main objectives in carrying out this goal are:

- to complete the projection of the rectangular survey system over all public lands to enable management of public lands and resources.
- to provide surveys for other Federal land management agencies as requested.
- to resurvey all public lands surveyed prior to 1910.

The program is separate for two distinct areas: The State of Alaska and the 29 public land ~~states~~ in the Lower 48.

#### BACKGROUND

Following the Revolutionary War, as the Government of the United States was being formed, the Continental Congress recognized in the early days, that an orderly plan of survey was prerequisite to orderly settlement of the public domain. In May, 1784, a five-man Congressional Committee chaired by Thomas Jefferson, devised a plan for locating and settling lands in the west. Their plan became law under the Ordinance of May 20, 1785. The first township was surveyed in Ohio in 1786.

In 1805, Congress legislated that real property derived from the public domain by patent should have the protection of immutable boundaries and fixed acreages (43 U.S.C. 752). The cadastral survey on the ground creates this and becomes a part of the patent. Therefore, official cadastral survey actions have a quasi-judicial standing. This responsibility was first vested in the General Land Office (G.L.O.). When the G.L.O. and the Grazing Service were combined in 1946, the Bureau of Land Management emerged with the cadastral survey function and administrative responsibility for the public domain. The Cadastral Survey program is made up of Original Surveys, Resurveys and Special Surveys.

Original Surveys, as part of establishing the rectangular grid throughout the nation, means placement of corner monumentation in exact locations, under a precise manner known as the public land survey system.

Resurveys are the reestablishment of Original Surveys according to the best available evidence on the ground. These surveys are conducted due to deterioration of corner monumentation.



Special Surveys are irregular surveys which do not conform to the rectangular system. They usually locate singular lines or boundaries as provided by law for homesteads, townsites, airports, etc.

Most of Original Surveys are conducted primarily in Alaska with Resurveys and Special Surveys largely concentrated in the Lower 48.

#### PROGRAM ACTIVITIES

BLM's activities have been oriented toward the broad program goal divided between Alaska and the Lower 48 States. These activities and FY 1978 expenditures are:

<u>Alaska Surveys</u>	<u>\$9,965,000</u>
In FY 1978, using contracted surveys and force account (survey by government employees only), the following number of acres will be surveyed:	
	<u>(000's acres)</u>

Native Selections (Alaska Native Claims Settlement Act)	3,200
State of Alaska Selections (Statehood Act)	1,800
Other - Native Allotments, Homesteads, Headquarters, Manufacturing and Town Sites	<u>(Under 100)</u>
	Total 5,000

Most are Original Surveys.

#### Lower 48 Surveys

In FY 1978, cadastral surveys will be conducted largely in the resurvey and special survey categories. Units of accomplishments, expressed in terms of miles of line surveyed and numbers of monuments set are 13,500 and 1,000 respectively.

The resources supported through cadastral survey are indicated below by percentage and estimated acreage surveyed. Acres (as unit measures of accomplishment) are used here for consistency and for comparability with Alaska surveys, which are always expressed in terms of acres.

<u>Resource</u>	<u>Percentage</u>	<u>Acres</u>
Land disposal and management	21	420,000
Energy development	24	580,000
Forestry management	22	440,000
Other Agency (Forest Service, National Park Service, BIA and Dept. of Defense requirements)	24	580,000
All other resources	9	180,000
	100	2,200,000



## SITUATION

The survey program in Alaska is defined by the requirements of the Alaska Native Claims Settlement Act (ANCSA), the Alaska Statehood Act, and other existing public land laws. ANCSA requires "immediate" conveyance of lands selected by Native villages and corporations and the Statehood Act requires transfer of Federal lands to the State within 25 years after passage of the Act (1958). These mandated tasks require cadastral survey up to 44,000,000 acres for ANCSA and up to 104,000,000 acres for the State of Alaska.

In the lower 48 States, the original mandated task of completing the rectangular grid throughout the Nation remains to be fulfilled. Fulfillment of this task proceeds slowly in-as-much as work currently judged to be of higher priority takes precedence. Original surveys in the lower 48 are only undertaken when there is a specific requirement for establishing corners and lines. This occurs, for example, when there is a need to make heretofore un-surveyed public land available for State, local or private purposes.

Resurvey of public lands surveyed prior to 1910 is necessary because of the large number of fraudulent surveys conducted under contract prior to 1910. In addition, materials such as wood posts and rock piles used at that time have deteriorated. As a result many monuments have been lost and now require replacement. This maintenance type remonumentation program is also carried out in relationship to a current high priority program. For example, to maintain the allowable cut, cadastral surveys should be scheduled several years in advance of sale layout. This would allow for marking Federal timber without losing large quantities (of a currently very valuable product) due to "falling back" because of uncertainties in boundary location.

Timely identification of land boundaries and legal property descriptions are prerequisites to public land transfers, energy development, easement acquisition, timber sales, granting rights-of-way, and a variety of other land management functions. They are, therefore, dependent on cadastral surveys. This work and that in support of other Federal land management agencies (the Forest Service in particular) are the essence of the current cadastral survey programs in the lower 48. Surveys required for the highest priority work are programmed each year to accommodate this requirement.

New technologies are rapidly entering on the scene. This could, in the not too distant future, change the survey program considerably, particularly in terms of production. The Bureau is using and adapting to the new techniques as rapidly as funds allow.



## PROGRAM PLAN

### Objectives

Specific objectives for the 4 year authorization period are:

#### Alaska:

- complete surveys for ANCSA at the rate of 3,900,000 acres a year.
- complete surveys for State selections at the rate of 1,800,000 a year.

#### Lower 48:

- complete surveys in support of land and resource programs. (Acreage stated in the table under Action Plan.)

## ACTION PLAN

BLM's action plan consists of conducting cadastral surveys using the traditional method of direct-hire survey teams - made up of a surveyor party chief and 3 - 4 survey aides or using contract surveys in all situations where this is amenable. In Alaska, where original surveys make up the bulk of the workload, contract surveys are used extensively.

Sufficient capability will exist in Alaska at the proposed FY 1979 level to carry out the existing known workload of surveying external boundaries of village and regional corporation selections under ANCSA, State of Alaska selections, and other miscellaneous surveys.

The situation will change dramatically when Congress takes action on the 4 System proposals - transfer of public lands to the Forest Service, National Park Service, et. al. Transfer of these lands would require extensive additional surveys, for which current capability is insufficient.

Increased production in terms of more miles of line surveyed and monuments set is expected in the future as greater use is made of ever changing advanced technology. Acquisition of an auto-surveyor - a high speed inertial survey system - is planned for use in large scale survey operations in the Lower 48. The use of this method, plus the base force account capability will result in surveys accomplished in support of the resource programs as listed below:



	(000's Acres)				
	<u>FY 1979</u>	<u>FY 1980</u>	<u>FY 1981</u>	<u>FY 1982</u>	<u>Total</u>
<u>Alaska</u>					
ANCSA	3,900	3,900	3,900	3,900	15,600
State Sel.	<u>1,800</u>	<u>1,800</u>	<u>1,800</u>	<u>1,800</u>	<u>7,200</u>
<b>Subtotal</b>	<b>5,700</b>	<b>5,700</b>	<b>5,700</b>	<b>5,700</b>	<b>22,800</b>

Lower 48

Lands	700	1,050	1,050	1,050	3,850
Energy	750	1,200	1,200	1,200	4,350
Forestry	700	1,100	1,100	1,100	4,000
Other Agency	750	1,200	1,200	1,200	4,350
All Other	<u>300</u>	<u>450</u>	<u>450</u>	<u>450</u>	<u>1,650</u>
<b>Subtotal</b>	<b>3,200</b>	<b>5,000</b>	<b>5,000</b>	<b>5,000</b>	<b>18,200</b>
<b>Grand Total</b>	<b>8,900</b>	<b>10,700</b>	<b>10,700</b>	<b>10,700</b>	<b>41,000</b>

SUMMARY TABLE  
FOUR YEAR AUTHORIZATION

BUDGET AUTHORITY \$ MILLIONS

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	4 Year Authorization Total
Alaska Surveys	\$10.0	\$11.0	\$11.0	\$11.0	\$11.0	\$44.0
Lower 48 Surveys	<u>8.1</u>	<u>9.0</u>	<u>10.8</u>	<u>10.8</u>	<u>10.8</u>	<u>41.4</u>
<b>Total</b>	<b>\$18.1</b>	<b>\$20.0</b>	<b>\$21.8</b>	<b>\$21.8</b>	<b>\$21.8</b>	<b>\$85.4</b>

POSITIONS

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Alaska Surveys	82	82	82	82	82
Lower 48 Surveys	<u>334</u>	<u>339</u>	<u>369</u>	<u>369</u>	<u>369</u>
<b>Total</b>	<b>416</b>	<b>421</b>	<b>451</b>	<b>451</b>	<b>451</b>

ACCOMPLISHMENTS  
(acres 000's)

Acres Original Surveys	5,110	6,300	6,300	6,300	6,300
Acres Resurveys and/or Special Surveys	<u>2,090</u>	<u>2,600</u>	<u>4,400</u>	<u>4,400</u>	<u>4,400</u>
<b>Total</b>	<b>7,200</b>	<b>8,900</b>	<b>10,700</b>	<b>10,700</b>	<b>10,700</b>



ADMINISTRATION  
ENFORCEMENT



FOUR YEAR AUTHORIZATION  
GENERAL ADMINISTRATION

GOAL

Provide adequate and timely professional administrative support to all Bureau of Land Management programs.

BACKGROUND

The General Administration activity has been established within the budgetary structure of the Bureau of Land Management since 1947. The activity as an operational element embraces the classical administrative functions of fiscal management, budget and programming, personnel management, contract and procurement services, and property management.

PROGRAM ACTIVITIES

Activities are oriented to the goal of providing support to land and resource management programs. These activities include:

- <u>Executive Management and Direction</u>	\$560,000
<p>This activity includes personnel to provide general management and overall executive direction of the agency. Only positions in the Washington Headquarters Office and the Denver Service Center are included.</p>	
- <u>Processing Billings and Payments Documents</u>	\$827,000
<p>This activity includes processing of 91,200 fiscal documents which make up the basis for the financial management system of the agency. For example, the documents involved are obligating and payment vouchers to carry out the internal fiscal operations of the agency, and billing documents which form the basis of the receipts collected either for services performed, cost reimbursements, or royalties and bonuses on OCS.</p>	
- <u>Processing Personnel Actions</u>	\$695,000
<p>This work element includes all actions involving personnel, from initial hiring to separation or retirement. In FY 1978, 7,900 such actions are expected for Washington Office and Denver Service Center staffs alone.</p>	
- <u>Recruitment of New Personnel</u>	\$105,000
<p>Rapidly expanding agency responsibilities over the past few years has given rise to a large recruitment effort -- interviewing, advertising, classification, and placement. FY 1978 recruitments are an estimated 300.</p>	



- Awarding Negotiated Contracts \$280,000
 

This activity includes all actions required to award contracts for services ranging from preparation of invitations to bid, audits of prospective bidders, negotiations leading to awards and approval of contract performance. In FY 1978, 260 negotiated contracts will be awarded.
- Awarding Formally Advertised Contracts \$140,000
 

This includes actions more routinely performed, many for the procurement of goods, such as seed or fencing, as well as of services. In FY 1978, 670 advertised contracts are expected to be let.
- Other Activities Not Mentioned Above \$870,000
 

This activity includes overhead costs of maintaining a headquarters and subordinate field offices. It includes budget and program development, property management and general services staffs in Washington and the Denver Service Center.

#### SITUATION

General administration support has always lagged behind program expansion in resource areas. Actually, providing for full scale administration has been decreasing in relation to other programs over the past several years. The following is an illustration:

<u>Fiscal Year</u>	<u>MLR (\$000) 1/</u>	<u>(\$000) General Administration</u>	<u>% General Administration of Total</u>
1971	108,828	2,507	.023
1972	118,631	2,690	.023
1973	133,067	2,966	.022
1974	161,126	3,328	.021
1975	206,837	4,404	.021
1976	262,510	4,594	.018
1977	290,700	4,798	.017
1977	290,700	3,477 2/	.012

1/ Management of Lands and Resources

2/ Adjusted when costs were shifted to create a separately identifiable program for Data Management.

Accelerated energy initiatives, both Bureau and non-Bureau, demanding prompt and rapid response have taxed past and current Bureau organizational abilities to carry out these new enlarged efforts. The passage of the Federal Land Policy and Management Act of 1976 has mandated new work and deadlines which again has added to the workload of the Bureau. As capability is increased in response to these mandates, corresponding capability will be required for administrative support.



## PROGRAM PLAN

### - Objectives

Specific objectives for the 4 year authorization period on an annual average basis are to:

1. provide the executive leadership and management direction for the Bureau's administrative operations.
2. process more than 154,000 billings and payments documents.
3. process 8,750 personnel actions.
4. complete recruitment actions on slightly more than 470 cases.
5. award approximately 405 negotiated contracts.
6. award approximately 1,125 advertised for bid contracts.
7. maintain the Washington Headquarters and subordinate field offices with budget, program development, property management, and general services staffs.

## ACTION PLAN

The requirements of General Administration are a function of the budget and manpower available to the agency. It is assumed that with planned increases in the resource programs, concurrent increases will be forthcoming for administrative support. Output, as measured by supporting program objectives, increases in direct proportion to the increase in positions.



BUDGET AUTHORITY  
\$ Millions

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>4-Year Authorization</u>
						<u>Total</u>
General Administration	3.5	4.0	5.0	6.0	7.5	22.5
<u>Positions</u>						
General Administration	170	187	221	256	307	
<u>Accomplishments</u>						
<u>Type</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>4-Year Authorization</u>
						<u>Total</u>
Billings & payments, documents processed	91,200	109,000	137,000	165,000	207,000	618,000
Personnel actions processed	7,900	8,000	8,500	9,000	9,500	35,000
Recruitment actions completed	300	340	420	500	620	1,880
Negotiated contracts awarded	260	310	390	430	490	1,620
Formally advertised contracts awarded	670	800	1,000	1,200	1,500	4,500

Other administrative functions of headquarters and field offices, including budget and program development, property management, and general services are not possible to quantify by units.



## FOUR YEAR AUTHORIZATION

### LAW ENFORCEMENT

#### GOALS

The Bureau of Land Management's law enforcement program goal is to enforce the laws and regulations governing the management, use and protection of the public lands.

#### BACKGROUND

The public lands have always been a source of Treasury revenues and a livelihood for many people who reside in the Western States. These lands were opened to recreation, and all forms of consumptive use. Many of the resources on public lands were taken for granted and consequently abused. These abuses were recognized and laws passed prohibiting the destruction of public land resources. However, BLM was not given the authority to enforce the enacted statutes. As more and more people used public lands, and resources became more valuable, it was evident that BLM would require law enforcement authority. In 1974, a task force study was conducted concerning enforcement of existing laws governing the public lands. The study resulted in establishment of the law enforcement program in November of 1975. The program consisted of employing professional law enforcement personnel to prevent the occurrence of prohibited acts on the public lands and to prepare investigative cases for prosecution.

Passage of the Federal Land Policy and Management Act of 1976 broadened law enforcement responsibility of the BLM and encourages contracts/cooperative agreements with local authorities to enforce Federal and State laws on public lands.

#### PROGRAM ACTIVITIES

Program activities necessary to carry out the goals of the Law Enforcement Program include:

##### Administration

This includes all equipment, clerical support, evaluation of the program and coordination with all other BLM programs. It also includes cooperative relations with other law enforcement agencies in support of their responsibility to carry out Federal, State and local laws.

##### Training

This includes the training of all law enforcement personnel as well as those under contract that do not meet Federal standards. This also includes basic training to meet Federal requirements of 320 hours and those refresher courses necessary to provide an effective law enforcement program.



## Investigation and Enforcement

This includes the investigation of some 600 cases during FY 1978. It also provides for the prosecution of law violations or use authorizations where penalties for criminal violations exist. It further provides for investigation and enforcement of public land laws by BLM law enforcement officers or those officers contracted for this purpose.

### SITUATION

The value of timber, mineral, vegetative materials, artifacts, watershed, and public property stolen or destroyed on public lands each year is estimated to be several million dollars. Some of the most common unlawful acts during FY 1977 included 21 cases of timber theft; 110 cases of wild horse molesting, improper disposal or theft; 10 cases of land fraud; 7 cases of theft of cactus and other vegetative material; 30 cases of range arson; 32 cases of theft of government property; and 10 cases of theft or destruction of artifacts. Increasing demands for natural landscaping around homes and other buildings have made cactus and other desert plants very valuable. This has resulted in the removal of thousands of cactus and other desert plants, primarily in California and Arizona. Many of these plants are considered threatened or endangered because of the removal. Profiteers are stripping the public lands of irreplaceable antiquities and are illegally removing wild horses and burros. Building stone, gravel and sand are being removed illegally and recreation facilities are being destroyed by vandals.

Under present authorizations, citations cannot be issued. This requires the law enforcement agents to take the individual directly to a judge or justice-of-the-Peace or to give them a written warning, which may be used in future violations.

As demands for resources increase, or new values are realized, violations will increase on public lands. This has been proven through passage of the Wild Horse and Burro Act where violations of the law are increasing on the public lands and throughout the country after excess animals have been adopted. Since wild horses and burros cannot be sold for commercial gain, the problems of enforcing the law after adoption of excess animals is a major concern. This problem will not be restricted to the Western States, but will have a potential in every state where animals have been adopted. Potential problems have been reduced through improved applicant screening prior to adoption. This, however, will not solve the ever increasing problem as thousands of excess animals will be adopted within the next few years. Currently, 39 percent of those cases investigated have involved violation under the Wild Horse and Burro Act.



The Federal Land Policy and Management Act authorizes law enforcement through Federal personnel, and contracts or cooperative agreements with local law enforcement agencies. Agencies under contract with the Federal Government and all Federal law enforcement agents must have 320 hours of specific training. Most of the local law enforcement agencies do not have the required training. Therefore, before contracts are issued, the law enforcement personnel carrying out the terms of the contract must receive the required training. Law enforcement agencies in the 11 Western States vary widely in their training requirements to meet local standards. Some counties in Colorado, Idaho, Montana, New Mexico, Oregon, and Wyoming will require all of the 320 hours of training required to meet Federal standards where other states such as California will only require an orientation course on Federal Law Enforcement.

#### PROGRAM PLAN

##### Objective

Specific objectives for the 4 year authorization period are:

- Reduce the occurrence of prohibited acts on public lands.
- Prepare cases in the prosecution of illegal acts on public lands.

##### Action Plan

BLM's plan to meet the law enforcement program goals are:

- Develop an adequate force of law enforcement agents and uniformed rangers in each of the 11 Western States and Alaska to carry out the law enforcement program.
- Develop cooperative agreements and issue contracts with local law enforcement agencies.
- Provide training for all personnel that do not meet Federal standards to enforce the laws on public lands.
- Supervise law enforcement contracts.
- Provide surveillance for reducing illegal acts on public lands.

##### Development of Law Enforcement Program

Developing the program over the four year authorization period to meet law enforcement needs will require employing a total of 53 special law enforcement agents and 99 uniformed rangers in 12 states. Special agents concentrate on investigating natural resource crimes and provide program management and contract supervision. Rangers are specialists in the field of natural resources that are trained to perform law enforcement duties as an additional function of their job. They will wear distinctive uniforms and perform law enforcement activities approximately 50% of their time.



### Preparation of Contracts and Cooperative Agreements

Law enforcement protection will require contracts/cooperative agreements with local law enforcement agencies in all heavy use areas and those areas having a history of continued violations. Contracts will be used to appropriate local officials having law enforcement authority to enforce Federal laws and regulations relating to the public lands within their respective jurisdictions.

Cooperative agreements will be entered into with local law enforcement agents to enforce the laws or ordinances of the State, county or other subdivision. This cooperation may include reimbursement to the cooperating agency for expenditures incurred while assisting in law enforcement activities on public lands.

### Training

All officers enforcing Federal regulations must have a minimum of 320 hours of law enforcement training plus regular refresher courses to keep current on new law enforcement procedures, laws and regulations.

### Supervise Law Enforcement Contracts

Contracting and establishing cooperative agreements with local law enforcement agencies will be the primary means of enforcing public land laws and regulations. Ensuring that the terms of the contracts are being carried out will require supervision. This supervision will be done by special agents who will evaluate performance and make changes as needed. The special agent will also develop cooperative relations with local enforcement agencies and see that BLM carries out its part of the agreements.

### Patrol

Patrolling the public lands will be the primary method to deter criminal acts. Patrol methods will be established and conducted to optimize protection of the public lands. This will be accomplished by the uniformed ranger force or local law enforcement officers making periodic or regular patrols through those areas where illegal acts are most likely to occur. Reported criminal cases will be investigated principally by the special agents with support and assistance by the rangers and local law enforcement officers.



BUDGET AUTHORITY

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>4 Year Authorization Total</u>
Law Enforcement	\$ 0.5	\$ 1.2	\$ 2.2	\$ 3.0	\$ 4.1	\$ 10.5

POSITIONS

Law Enforcement <sup>1/</sup>	10	28	68	110	152
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<sup>1/</sup> This includes special agents and uniformed rangers.

ACCOMPLISHMENT WITH AUTHORIZATION

Number of Special Agents	10	15	27	40	53
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Number of Uniformed Rangers	0	13	41	70	99
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Number of Contracts and Cooperative Agreements	12	33	62	92	122
------------------------------------------------	----	----	----	----	-----

Number of Cases Investigated Each Year	585	675	1,215	1,800	2,385
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## ACQUISITION, CONSTRUCTION AND MAINTENANCE



CONSTRUCTION



FOUR-YEAR AUTHORIZATION

BUILDING CONSTRUCTION

GOALS

The Bureau of Land Management Building Construction program provides office, warehouse, district yards and related facilities necessary to carry out Bureau programs where they cannot be obtained from GSA. The goal of the program is to support land and resource management with these facilities.

BACKGROUND

When the Bureau of Land Management was established in 1946 its physical facilities were inherited from its parent agencies, the General Land Office and the Grazing Service. As BLM's role in managing the public lands grew, it inherited facilities from other agencies such as the Civilian Conservation Corps and the Fish and Wildlife Service. Until 1963 BLM building construction was limited to fire fighting facilities in Alaska. However, by 1967 BLM began to construct its own office buildings, warehouses, shops and other facilities that were specifically tailored to BLM's resource management obligations. This construction was necessitated by the remote location of many BLM offices where adequate Federally owned or leased facilities were unavailable.

PROGRAM ACTIVITIES

BLM building construction program activities and current (FY 1978) annual expenditures are:

- Construction Survey \$ 30,000

This activity includes work done to obtain data necessary for designing facilities and acquisition of necessary easements.

- Construction Design \$ 130,000

This activity includes all work done in designing a facility. Also included are contract preparation, design review, and administration of design contracts.

- Construction Operations

This activity includes work necessary to advertise, award, supervise and administer construction contracts. The cost of construction contracts is also included in the activity.

- Administration \$ 70,000

This activity includes program coordination, clerical work, and employee training.

TOTAL \$ 3,570,000



## SITUATION

BLM's expanding responsibilities in managing the public lands have resulted in an increase in its need for office, storage and other specialized facilities. Increased manpower has resulted in the need for additional space and new offices have been established to bring management closer to the lands being managed. At the same time, the location and condition of many BLM facilities are no longer adequate for efficient use. BLM has added 259,000 sq. ft. of office space since 1972. Ninety-five percent has been through acquisition of GSA leased space. Whenever such space is unavailable or inadequate for BLM needs, new construction is the only alternative to continuation of inefficient operating conditions.

The Washington Office, Denver Service Center and twelve State Offices are located in GSA provided space. GSA provides space for 82% of BLM's 56 District Offices and 68% of the detached Resource Area Offices (most Resource Area Offices are located at the district office itself). BLM ownership has been established either by BLM construction on the public land or by inheritance from other government agencies.

Necessary to the operation of a BLM District Office are warehousing and yard facilities. These facilities are generally less available from GSA than is office space. BLM owns 62% of the yard and warehouse facilities Bureau-wide. A typical situation at a BLM District Office is a GSA leased facility in town and a BLM warehouse and yard facility outside of town on public land. Twenty-five districts out of the fifty-six have facilities that are split in this fashion.

From the standpoint of efficiency, BLM regards a combined office and yard located just outside of town on public land as the most desirable arrangement. It eliminates time wasted traveling between separate yard and office facilities and provides for greater organizational control. Fire and other heavy vehicles can be dispatched to their destination without having to go through town. Where districts are located in relatively small cities, the lack of a combined facility can be simply a minor nuisance but, in the more urban areas, the lack of a combined facility or the location of a yard close in the city can be a major problem.

Organization studies have shown that an increasing number of Resource Area Offices can better serve the public and provide for more effective public land management if they are located near the managed area instead of the District Office. BLM has established 37 detached Resource Area Headquarters in the last ten years. Of the 37 detached headquarters, 12 are owned by BLM and the balance are leased through GSA.

At those locations where new construction is needed, it can be accomplished by either BLM construction, when appropriated by Congress, or through lease purchase agreements arranged by GSA. As it now stands the GSA lease purchase agreement has certain defects. GSA's specific authority to enter into lease purchase agreements lapsed in 1975. Nevertheless similar types of arrangements were made at BLM's Rock Springs and Rawlins, Wyoming District Offices where GSA arranged with a developer to construct office buildings on the public land. GSA entered into a long-term lease arrangement with the



developer. At the end of the lease period, the title to the buildings will pass to the government because they will be in effect in trespass. Difficulties arose when the Internal Revenue Service ruled that the developer could not depreciate his construction costs for tax purposes because of the peculiar nature of this type of agreement. This of course, adversely impacted the profitability of the developer's investment, and when GSA attempted to arrange needed expansion at Rock Springs and Rawlins the developer insisted that the entire lease be renegotiated. GSA and the developer were unable to reach an agreement on a new lease, and consequently, BLM's attempt to enlarge the facilities were frustrated.

GSA has indicated that it does not believe in general that lease purchase agreements provide facilities at least cost to the government and will only enter into one where there are no alternative means of construction. Because of a limited construction budget, BLM has actively sought lease purchase agreements from GSA in addition to its own construction proposals. Construction of office facilities under a lease-purchase arrangement has recently begun for a District Office in Lakeview, Oregon. The availability of such space in the future, however, is an imponderable. GSA has no authority to directly construct facilities on the public land.

BLM has identified building construction needs at more than 35 locations that should be addressed in the future. Thirty eight buildings are shown for construction during the four year authorization period.

FY 1979 features are discussed below and are reasonably representative of the projects listed in the Plan of Action.

The situation of Fairbanks, Alaska represents one of BLM's most serious construction problems. At present, the District Office occupies facilities leased through GSA. The lease expires in October of 1978, and the lessor has refused to renew the lease. In FY 1977 \$3.5 million was appropriated for a new office building at Ft. Wainwright to accommodate the BLM district staff. There remains a need for warehousing, shop, and fire facilities which must be relocated at Ft. Wainwright. BLM will make due with dated excess Army facilities until they can be replaced by new construction. The District will face major difficulties in accomplishing its mission after October of 1978. The problems are aggravated by the high costs and difficulty of accurately predicting construction costs in Alaska.

BLM has responsibility of providing facilities for the Boise Interagency Fire Center (BIFC). Other agencies involved are the Forest Service, Park Service, Weather Service, and the Interior's Office of Aircraft Services.

The remaining construction needs are critical at each location. An example is the situation at BLM's District Office in Elko, Nevada where it is proposed to relocate existing facilities to a new location outside of town.



Present facilities are adjacent to a residential area where vehicles involved in fire operations have caused safety hazards to local residents. The location of the facility has been criticized by local officials. The facility is located on an annual flood plain and parts are inundated during heavy rains. In addition, the office is inadequate in size and parts of the complex will be dedicated to a railroad right-of-way.

#### PROGRAM PLAN

##### Objectives

- Construct highest priority buildings during the four year authorization period.

##### Action Plan

- Perform site studies to determine construction needs.
- Contract out for construction
- Specific building construction projects for the four year authorization period are:

#### FY 1979

ID	Boise Interagency Fire Center	Facility Complex Phase I	\$2,490,000
AK	Fairbanks District Office (DO)	Design of Multi-Facilities Building	380,000
OR	Lakeview DO	Mechanics Shop	320,000
NV	Elko DO	Warehouse and Shop	850,000
UT	Henry Mtn. Resource Area Hdqtr. (RAH)	Employee Housing	660,000
WY	Rawlins DO	Warehouse	80,000
AZ	Communications Bldg. (3)		22,000
ID	Shoshone DO	Office expansion	120,000
CA	Susanville DO	Warehouse, Shop and Fire Dispatch	650,000
MT	Lewistown DO	Fire retardant plant and vehicle parking	66,000
AZ	Black Rock Mountain Lookout	Fire Lookout	80,000
ID	Squaw Butte Lookout	Fire Lookout	70,000
		Survey and Design	<u>470,000</u>



1980

AK	Fairbanks D.O.	Multi-Facilities Building, Phase I	\$4,500,000
AK	Anchorage D.O.	Heating and Ventilating System	\$200,000
CO	Craig D.O.	Warehouse	\$500,000
NV	Elko D.O.	Office	\$1,000,000
ID	BIFC	Phase II (Maintenance Building)	\$375,000
		Survey, Design, & Administration	<u>\$580,000</u>
			\$7,155,000



FY 1981

AK	Fairbanks D.O.	Multi-Facilities Building, Phase II	\$4,300,000
AZ	Arizona Strip D.O.	Office, Vehicle Storage	\$700,000
CA	King Range Admin. Site	Office, Warehouse and Quarters	\$800,000
NM	Farmington RAH	Office Addition	\$150,000
NV	Carson City D.O.	Warehouse	\$850,000
	BIFC	Phase III (Training Center)	\$1,600,000
		Survey, Design & Administration	<u>\$600,000</u>
			\$9,000,000



FY 1982

AK	Fairbanks D.O.	Mess Hall	\$1,700,000
CA	Chimney Peak Fire Station	Office, and Quarters	\$400,000
CA	Ravendale Fire Station	Office and Storage	\$240,000
AZ	Yuma D.O.	Office	\$830,000
CO	Montrose D.O.	Warehouse and Shop	\$440,000
ID	Salmon D.O.	Office Expansion Shop and Warehouse	\$640,000
ID	Burley D.O.	Office, Warehouse and Shop	\$1,600,000
NV	Winnemucca D.O.	Warehouse	\$370,000
WY	Kemmer RAH	Office	\$220,000
WY	New Castle RAH	Office	\$250,000
		Survey, Design & Administration	<u>\$465,000</u>
			\$7,155,000



BUDGET AUTHORITY

	\$ Millions					<u>4 Year Authorization Total</u>
	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	
Building Construction	\$3.6	\$6.3	\$7.2	\$9.0	\$7.2	\$29.7

Positions

Building Construction	22	22	22	22	22
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Accomplishments with Authorization

Building Constructed	3	12	4	5	13	38
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## FOUR YEAR AUTHORIZATION

### RECREATION CONSTRUCTION

#### GOALS

Under the Bureau of Land Management's recreation construction program, recreation facilities are constructed to implement recreation activity plans that are developed within BLM's planning system. Facilities include: campground, picnic areas, visitor information centers, and water and sanitary facilities. The specific goals of the recreation construction program are:

1. Provide for the health and safety of visitors to the public lands.
2. Protect the public lands from visitor abuse.
3. To inform the visiting public.

#### BACKGROUND

Until 1964, the Bureau of Land Management's construction of recreation facilities was limited to facilities in Alaska and in the Oregon and California Grant Lands. There was no clear mandate for management of the public lands. The Taylor Grazing Act was considered by many to provide interim management of lands pending their ultimate disposition. For this reason, little development of recreation facilities occurred. Nevertheless, by the 1960's the public domain lands were receiving millions of visits from people using them for recreation purposes. This recreation use was entirely uncontrolled and visitors left a legacy of piled up trash and other wastes. Their presence often created a major fire hazard and stream pollution became a serious problem in many heavy use areas.

In 1964, Congress passed the Classification and Multiple Use Act which gave impetus to recreation use management on the public lands. Since then recreation facilities, including sanitary facilities, picnic table, fire rings, well water supplies, and visitor contact facilities have been constructed to accommodate visitor use in heavy use areas.

#### PROGRAM ACTIVITIES

BLM recreation construction program activities and current (FY 1978) annual expenditures are:

##### - Construction Survey

This activity includes work done to obtain data necessary for designing facilities and acquisition of necessary easements.



- Construction Design

This activity includes all work done in designing a facility. Also included is contract preparation, review of designs, and administration of design contracts.

- Construction Operations

This activity includes work necessary to advertise, award, supervise and administer construction contracts. The cost of construction contracts is also included in this activity.

- Administration

This activity includes program coordination, clerical work, employee training, public information and education.

SITUATION

In terms of sheer numbers of people, the greatest use of the public lands is by recreationists. Currently, 80 million visitors engage in camping, hiking, picnicking, hunting, fishing, off-road vehicle use, river rafting, rockhounding, and other recreational pursuits. These visitors use more than 20 million gallons of water and leave behind 1,800 tons of liquid waste and 220 tons of solid waste.

Visitors are drawn to lakes, river sides, sand dunes, and sites with high scenic qualities. Without basic recreation facilities, the land surface is abused, streams are polluted, trash is scattered. Wildfires result from fires built in hazardous areas, and lack of sanitation facilities creates hazards to health. Existing facilities accommodate less than 15% of the estimated demand for recreation facilities on the public lands.

Particular problems relating to high visitor use occur on the California Desert, along the Colorado River between California and Oregon, in caves in New Mexico, the El Malpais area of New Mexico, the Little Sahara sand dunes in Utah, and the upper Missouri River in Montana.

PROGRAM PLAN

Objectives

- Construct recreation facilities at the most critical heavy use areas identified under BLM planning system.



### Action Plan

- Determine specific recreation site needs.
- Contract out for construction.
- Specific recreation construction projects for the four year authorization are:

FY 1979

AK	Paxson Lake Campground	Water and Sanitary Facilities	\$ 90,000
CA	Mohave Way Station	Visitor Contact Center	130,000
CA	Pacific Crest Trailhead	15 Family Unit Campground	120,000
ID	Salmon/Snake River Management	Visitor Contact Center & 2 Launching Ramps	90,000
NM	Cave Protection	Gates, Fences & Signs	45,000
OR	River Contact Stations	Four Roofed Bulletin Boards	30,000
	Survey, Design, and Administration		75,000
		Total	\$580,000

FY 1980

CA	Cajun Way Station	Visitor Contact Center	\$170,000
CO	Blanca Habitat Area	Sanitary Facilities	35,000
NM	Organ Mountain	20 Family Units Visitor Center	310,000
NM	Cave Management	Cave Protection	45,000
OR	Kiger Gorge	Scenic Viewpoint Sanitary Facilities	130,000
	Survey, Design, and Administration		90,000
		Total	\$780,000



FY 1981

CA	Cima Way Station	Visitor Center	\$ 130,000
CA	Clear Creek Campground	30 Family Units	320,000
NM	El Malpais	50 Family Units	460,000
NM	Cave Management	Cave Protection	50,000
	Survey, Design, and Administration		<u>140,000</u>
			Total \$1,100,000

FY 1982

AK	Yukon Crossing Campground	40 Family Units Visitor Center	\$ 760,000
AZ	Senator Wash	30 Family Units, Sewage Treatment, and Electric Power	800,000
AZ	Parker Strip	30 Family Units Visitor Center	450,000
CA	Whitewater Way Station	Visitor Center	1,000,000
CA	Cima Way Station	Visitor Center	170,000
OR	Steens Mountain Development	4 Scenic Viewpoints	220,000
NM	Cave Management	Cave Protection	50,000
NM	Rio Grand Campground	45 Family Units	200,000
	Survey, Design, and Administration		<u>295,000</u>
			Total \$3,945,000



BUDGET AUTHORITY  
\$ Millions

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>4 Year Authorization Total</u>
Recreation Construction	\$1.4	\$0.6	\$0.8	\$1.1	\$3.9	6.4

Positions

Recreation Construction	6	6	6	6	6
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Accomplishments with Authorization

Recreation Facilities					
Construction (number)	9	5	4	8	
Family Units	15	20	80	385	



## FOUR YEAR AUTHORIZATION

### TRANSPORTATION CONSTRUCTION

#### GOALS

The Bureau of Land Management transportation construction includes the construction of roads, trails, and bridges on the public land. The goals of the transportation construction program are:

1. Provide safe physical access to the public lands for public use and resource management.
2. Provide for the maximum use, development, and protection of the public lands.

#### BACKGROUND

Prior to the establishment of BLM in 1946, there was no established road construction policy on the public lands. The use of the lands was governed by the thousands of public land and mining laws that had been passed over the years. Roads were constructed by ranchers, mining companies, railroads, county and State governments, and any one who found a need to have physical access across the public land. Most of these roads were primitive and were constructed to meet minimally the original need. During the 1930's, the Civilian Conservation Corps constructed many miles of road on the public lands.

When BLM was established, its road construction program was limited to the Oregon and California Grant Lands. These lands rich in timber resources required road construction to make the timber available for sale.

As the West experienced rapid growth after the second World War, the use of the public lands by recreationists grew dramatically. By the 1960's millions of recreationists used the public lands. The existing primitive road system was inadequate for this heavy use for which it was not designed.

As BLM's resource management role grew, access to specific areas not included in the primitive road system was needed. Most important was the need to gain access to timber resources in California, Idaho, Colorado, Wyoming, and eastern Oregon.

In 1964, contract authority under the "Public Lands Development Roads and Trails" appropriation enabled BLM to construct needed roads for access, development, and protection of the public lands. In 1978 a new subactivity "Transportation Construction" has been established under "Construction" to construct roads, trails, and bridges that were previously constructed under "Public Lands Development Roads and Trails" appropriation.



## PROGRAM ACTIVITIES

BLM transportation construction activities are current (FY 1978) annual expenditures are:

- Construction Survey \$320,000

This activity includes work done to obtain data necessary for designing roads.

- Construction Design \$320,000

This activity includes all work done in designing a facility. Also included is contract preparation.

- Construction Operations \$4,040,000

This activity includes work necessary to advertise, award, supervise, and administer construction contracts. The cost of construction contracts is also included in this activity.

- Environmental Analysis \$ 35,000

This activity includes preparation of environmental analysis of recreation construction projects.

- Administration \$250,000

This activity includes program coordination, clerical work, and employee training.

Total \$4,965,000

## SITUATION

The BLM transportation system is necessary for management and development of the public lands. It serves all of BLM's resource management resource programs as well as providing access to the public lands for the public at large. In terms of sheer numbers of vehicles, the greatest traffic on BLM roads come from people utilizing the public lands as a place for leisure activity (an estimated 80 million in 1977). This traffic places the greatest burden on the existing road system which was not designed to accommodate present use levels or passenger type vehicles.

The 80 million visitors to the public lands in FY 1978 will use a transportation system consisting of more than 44,000 miles of road, 5,000 miles of trail, and an estimated 250 major bridges. Of the 44,000 miles of road, 32,000 are classified as primitive and approximately 30,000 are in need of upgrading. These roads can only be used seasonally. Their primitive character can be hazardous to motorists who are accustomed to the highly developed roads in urban areas.



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Erosion caused by poor water dispersion can result in as much as 100 tons of soil loss per mile of poorly surfaced roads each year. Many roads run along streams and the resulting erosion can impact several miles downstream; 6,500 miles of new road construction has been identified as necessary to implement long-term management needs (estimated prior to FLPMA passage). Much of the timber available for sale will require road construction to provide needed access. Roads are needed to channel visitors away from heavy use areas to other areas that can still accommodate increased recreation use and to develop recreation sites.

#### PROGRAM PLAN

##### Objectives

Specific objectives for the 4 year authorization period are:

- Grade 143 miles of roads.
- Surface 182 miles of roads.
- Construct 97 miles of trails.
- Construct 177 bridges.

##### Action Plan

- Inventory road construction needs.
- Maintain transportation plans.
- Perform environmental analyses.
- Contract out for construction.



BUDGET AUTHORITY  
\$ Millions

4 Year  
Authorization  
Total

	1978	1979	1980	1981	1982	
Transportation Construction	\$5.0	\$4.2	\$4.2	\$4.5	\$5.0	\$17.4

Positions

	54	54	54	54	54	
Transportation Construction	54	54	54	54	54	54

Accomplishments with Authorization

Road Construction

Grading (Mi.)	76	28	30	40	45	
Surfacing (Mi.)	24	47	45	45	45	
Trails (Mi.)	25	22	25	25	25	
Bridges (No.)	18	27	50	50	50	



ACQUISITION



## FOUR YEAR AUTHORIZATION

### ACQUISITION

#### GOALS

The Bureau of Land Management's acquisition program includes the acquisition of easements for public access to the public land and the purchase of land. The goal of the acquisition program is to:

1. Acquire access to the public lands for the public and for BLM management.
2. Purchase land where private inholdings or land adjacent to the public lands interferes with efficient public land management.

#### BACKGROUND

During settlement of the west, public land laws and western topography often made it possible for private landowners to block access to large areas of the public lands with only a small private land holdings. Under railroad land grants, alternating sections of public land were given to the railroads. This resulted in ownership patterns which resembled a checker board where public land sections were effectively blocked by the private ones. Where private land holders can successfully block access to the public lands, they can exercise exclusive use of the blocked off areas. In many instances landowners have charged fees to public land users for crossing their land.

At present BLM has legal access to only 44% of the 470 million acres of public land. The rest, 270 million acres is, or could be, blocked to public access. Legal access is necessary for the protection, development, administration, and use of the public land.

#### PROGRAM ACTIVITIES

BLM's acquisition program activities and current (1977) annual expenditures are:

<u>Easement Acquisition</u>	\$1,275,000
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This activity includes work necessary for acquiring access to the public land. Work includes negotiation with landowners, appraisals, obtaining title evidence, document preparation, and costs of actual acquisition.



Land Acquisition and Exchange

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This activity includes work necessary for acquiring or exchanging land. Work includes negotiations with landowners, appraisals, obtaining title evidence, document preparation, and costs of actual land purchases.

<u>Administration</u>	\$ 225,000
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This activity includes program coordination, clerical work, and employee training.

Total	\$1,500,000
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SITUATION

BLM presently has legal access to only 44% of the 470 million acres of public lands. The rest, 470 million acres is, or could be, blocked to public access. Easement and land acquisition supports BLM resource management programs, and the transportation construction program. Easements will be necessary to sell 450 million board feet of timber and construct 140 miles of road over the 4 year authorization period. Easements will also be necessary to support recreation activity plans and insure proper supervision of range use.

Land acquisition authority has been acquired under the Federal Land Policy and Management Act of 1976. Land acquisition proposals will be reviewed and considered for purchase during the second four year authorization period. Lands to be acquired will be for administrative and other purposes not covered by Land and Water Conservation Fund authority to purchase lands for recreation and wildlife purposes.

PROGRAM PLAN

Specific objectives for the 4 year authorization period are:

- Acquire 245 easements annually.

Action Plan

- Inventory easement and land acquisition needs based upon transportation plans and resource program activity plans.
- Negotiate and acquire land and easements from private landowners.



BUDGET AUTHORITY  
\$ Millions

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>4 Year Authorization Total</u>
Easement Acquisition	1.5	1.7	1.7	1.7	1.7	6.8
Land Acquisition						
Total Acquisition						

Positions

Acquisition	25	25	25	25	25
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Accomplishmnts with Authorization

Easements Acquired (No.)	215	245	245	245	245	980
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MAINTENANCE



- <u>Building Maintenance</u>	<u>\$1,585,000</u>
This activity includes actual maintenance operations.	
- <u>Administration</u>	<u>\$ 346,000</u>
This activity includes program coordination, clerical work, employee training.	
Total	<u>\$2,011,000</u>

#### SITUATION

BY 1979, BLM will maintain more than 350 buildings, containing more than 1 million square feet of space. Many of these were constructed during the 1940's and are located in the western states and Alaska where they are subject to extreme weather conditions. Temperature extremes make office buildings without good insulation potentially high energy consumers. Many of the buildings do not meet minimum safety standards for wiring, plumbing, ventilation, and storage of equipment.

Maintenance requirements reflect the aging of BLM facilities, increased emphases on insulation and other energy conservation measures, stricter Federal, State, and local health and safety standards, and construction of new facilities.

#### PROGRAM PLAN

##### Objective

- Maintain all BLM buildings on a schedule which will minimize long run maintenance and future construction costs.

##### Action Plan

- Conduct condition surveys to determine maintenance needs.
- Perform corrective maintenance to correct deficiencies.
- Perform preventive maintenance to reduce or eliminate occurrence of serious maintenance problems.
- Install necessary storm doors, windows and insulation to reduce energy consumption.



BUDGET AUTHORITY  
\$ Millions

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>4 Year Authorization Total</u>
Building Maintenance	2.0	2.0	2.4	2.5	2.7	9.6

Positions

Building Maintenance	16	16	16	16	16
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Accomplishments with Authorization

Buildings Maintained No.	360	366	370	375	388
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## FOUR YEAR AUTHORIZATION

### RECREATION MAINTENANCE

#### GOALS

The Recreation Maintenance program consists of maintenance of BLM developed recreation sites, cleanup of areas outside developed recreation sites, and corrections of hazardous conditions on the public lands. Goals of the Recreation Maintenance program are to:

1. Provide for the health and safety of visitors to the public lands.
2. Protect the government's investment in its recreation facilities.
3. Protect the public land from visitor abuse.

#### BACKGROUND

Until 1964, the Bureau of Land Management's construction of recreation facilities was limited to facilities in Alaska and in the Oregon and California Grant Lands. There was no clear mandate for management of the public lands. The Taylor Grazing Act was considered by many to provide interim management of lands pending their ultimate disposition. For this reason, little development of recreation facilities occurred. Nevertheless, by the 1960's the public domain lands were receiving millions of visits from people using them for recreation purposes. This recreation use was entirely uncontrolled and visitors left a legacy of piled up trash and other wastes. Their presence often created a major fire hazard and stream pollution became a serious problem in many heavy use areas. Towns and cities used the public lands as city dumps and over the years, tons of trash accumulated.

In 1964 Congress passed the Classification and Multiple Use Act which gave impetus to the management of recreation use on the public lands. Recreation facilities were soon constructed on the public lands and efforts were made with much assistance from volunteers to clean up the trash that had accumulated over the years.

The Bureau of Land Management's Recreation Maintenance program came into being to maintain the recreation facilities which BLM has constructed and to clean up current and past trash accumulation on the public lands.

#### PROGRAM ACTIVITIES

BLM's activities and FY 1978 expenditures are:

<u>Undeveloped Site Cleanup</u>	\$545,000
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This activity includes cleaning up undeveloped sites or other areas of public lands. An undeveloped site may include trash barrels, portable toilets, or other temporary improvements.



Hazard Reduction

\$ 80,000

This activity includes planning and completing hazard reduction on public lands. Work such as signing, filling mine shafts, and barrier fencing is accomplished.

Recreation Operations

\$780,000

This activity includes cost and time spent in the day-to-day operation of developed recreation sites. Includes such work as cleaning and resupplying rest rooms, garbage pickup, entrance station operations and site patrol.

Recreation Site Maintenance

\$960,000

This activity includes actual maintenance at developed recreation sites.

Project Planning

\$120,000

This activity includes recreation maintenance planning.

Administration

\$579,000

This activity includes program coordination, clerical work, employee training, space and utilities.

Total

\$3,064,000

SITUATION

Existing capability provides for annual maintenance of 4,055 of the 5,400 family units at BLM's 326 developed recreation sites.

The public lands currently receive 80 million visits from recreationists who engage in camping, hiking, picnicking, off-road vehicle use, river rafting, and rockhounding. There are 4.5 million visitors at the most heavily used areas and developed sites. Visitors use more than 20 million gallons of water and leave behind 1,800 tons of liquid waste and 220 tons of solid waste. BLM maintains more than 4,000 family units to accommodate the influx of visitors. Facilities include picnic tables, sanitary facilities, camping areas, fireplaces, and at many locations, water supplies. Also included are visitor contact centers. These centers provide information which will contribute to a meaningful visit to public lands as well as inform the public of hazards and the fragile nature of many resources. Maintenance involves collection of trash, and replacement of worn out facilities.

Cleanup is also provided on the public lands where there are no developed recreation facilities. Trash is collected at sites where high visitor use has occurred, along roadsides and waterways, and at unauthorized dump areas. The objective is to insure that the scenic attractiveness of the public lands is preserved, and that accumulated trash, garbage, and other items do not present health or safety hazards to others.



There were an estimated 75 million visitor days on the public lands not associated with developed facilities.

Hazards such as abandoned mine shafts and caves pose a threat to the unwary visitor. BLM posts signs, constructs fences and gates to reduce or eliminate hazards to visitors.

The Safe Drinking Water Act, P.L. 93-523, includes a requirement for periodic testing of water supplies, and, where necessary, installation of chlorination devices which must be maintained. Executive Order 11572 requires BLM to replace primitive pit toilets with sealed vault toilets to prevent sewage from contaminating groundwater around campsites. These vault toilets require periodic pump out and maintenance to keep them operational.

#### PROGRAM PLAN

##### Objectives

Specific objectives for the four year authorization period are:

- Annually maintain 5,400 developed family units.
- Cleanup 10,200 acres annually at undeveloped sites.
- Correct 1,230 hazards annually.

##### Action Plan

- Develop standards for recreation maintenance.
- Maintain maintenance schedules.
- Contract out maintenance efforts.
- Continue to cooperate with organizations and private citizens in public land cleanup activities.

##### Budget Authority \$ Millions

	1978	1979	1980	1981	1982	4 Year Authorization Total
Developed site maintenance	\$1.9	\$1.9	\$2.1	\$2.3	\$2.5	\$8.8
Undeveloped site cleanup	0.8	0.8	0.8	0.8	0.8	3.2
Hazard reduction	0.4	0.4	0.4	0.4	0.4	1.6
Total Recreation Maint.	\$3.1	\$3.1	\$3.3	\$3.5	\$3.7	\$13.6

##### Positions

Recreation Maintenance	16	18	20	22	24
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Accomplishments with Authorization

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>
Developed sites maintained (No.)	4,055	4,055	4,350	4,645	5,235
Undeveloped acres cleaned up (Acres)	10,200	10,200	10,200	10,200	10,200
Hazards corrected	1,230	1,230	1,230	1,230	1,230



## FOUR YEAR AUTHORIZATION

### TRANSPORTATION MAINTENANCE

#### GOAL

The Bureau of Land Management's Transportation Maintenance program includes maintenance of roads, trails, and bridges on the public lands. The goals of the transportation maintenance program are to:

1. Insure safe public access to the public lands for the general public and for BLM management.
2. Protect the government's investment in its transportation system.
3. Reduce the need for future road and trail construction.

#### BACKGROUND

Prior to the establishment of BLM in 1946, there was no established road maintenance policy on the public lands. The use of the lands was governed by the thousands of public land and mining laws that had been passed over the years. Roads were constructed by ranchers, mining companies, railroads, county and state governments, and any one who found a need to have physical access across the public land. Most of these roads were primitive and were constructed to only minimally meet the original need. During the 1930's the Civilian Conservation Corps constructed many miles of road on the public lands.

In 1961, BLM began to build roads on the public lands on a very small scale. The program was expanded in 1964 when BLM obtained contract authority for road and trail construction by the Public Aid to Highways Act. Until 1967, maintenance of BLM's transportation system was accomplished under the "Management of Lands and Resources Appropriation". After 1967, it was accomplished under the "Construction and Maintenance" appropriation.

#### PROGRAM ACTIVITIES

- <u>Project Plans</u>	\$180,000
This activity includes work maintenance inventories, survey, schedules and plans.	
- <u>Road Maintenance</u>	\$1,416,000
This activity includes annual maintenance of 9,000 miles of road.	
- <u>Trail Maintenance</u>	\$40,000
This activity includes annual maintenance of 200 miles of trail.	



- <u>Bridge Maintenance</u>	\$163,000
This activity includes annual maintenance of 14 bridges.	
- <u>Administration</u>	\$418,000
This activity includes program coordination, clerical work and employee training.	
Total	\$2,217,000

#### BACKGROUND

BLM's transportation system consists of more than 44,000 miles of road, 5,000 miles of trail, and an estimated 250 major bridges. Of the 44,000 miles of road, 32,000 are classified as primitive and approximately 30,000 are in need of upgrading. These roads do not meet safety standards and many can only be used seasonally. Their primitive character can be hazardous to motorists who are accustomed to the highly developed roads in urban areas. Erosion caused by poor water dispersion and channeling can result in as much as 100 tons of soil loss per mile of poorly surfaced roads each year.

In order to provide periodic maintenance to all roads and bridges, BLM must maintain 18,000 miles of road and 50 bridges annually. At present capability BLM maintains 50% of its roads and 28% of its bridges to the optimum maintenance level.

#### PROGRAM PLAN

##### Objectives

Specific objectives for the 4 year authorization period are:

- Increase annually road maintenance to 11,000 miles.
- Increase annual bridge maintenance to 50 bridges.
- Maintain 210 miles of trail annually.

##### Action Plan

- Inventory maintenance need.
- Maintain maintenance schedules.
- Perform maintenance by contract and where cost effective by BLM employees.



BUDGET AUTHORITY  
\$ Millions

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>4 Year Authorization Total</u>
Road Maintenance	2.1	2.1	2.2	2.4	2.5	9.2
Trail Maintenance	0.1	0.1	0.1	0.1	0.1	.4
Bridge Maintenance	<u>0.1</u>	<u>0.1</u>	<u>0.2</u>	<u>0.2</u>	<u>0.2</u>	<u>.7</u>
Total Transportation Maintenance	2.3	2.3	2.5	2.7	2.8	10.3

POSITIONS

Transportation Maintenance	23	23	23	23	23
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ACCOMPLISHMENT WITH AUTHORIZATION

Roads Maintained (Mi)	9,085	9,085	9,585	10,585	11,085
Trails Maintained (Mi)	210	210	210	210	210
Bridges Maintained (No)	14	14	50	50	50



PAYMENTS IN LIEU OF  
TAXES



## FOUR YEAR AUTHORIZATION

### PAYMENTS IN LIEU OF TAXES

#### GOALS

The goal of this appropriation is to provide funds to local jurisdictions for certain public lands within their jurisdictional boundaries to relieve fiscal burdens created by the presence of these Federal lands.

#### BACKGROUND

On October 20, 1976, the President signed into law P.L. 94-565 (90 Stat. 2662) which provides that payments be made to local governments for BLM, Forest Service, and certain other agency administered Federal lands. The payments may be used for any governmental purpose.

Under Section 2 of the Act, the formula provides a payment of either 75 cents per acre, reduced under certain circumstances by existing receipt payments (such as BLM Mineral Leasing Act payments) or 10 cents per acre with no reduction for receipt payments, with both alternatives limited by a ceiling based on population. Additional payments may be made, not limited by population ceilings, under Section 3 of the Act for land acquired for the Redwoods National Park or for additions to the National Park System and National Forest Wilderness areas after December 31, 1970. These payments are equal to one percent of fair market value per year for five years with annual payments not to exceed the amount of real property taxes levied during the last year the land was in private ownership.

The payments for Fiscal Year 1977 were made on September 30, 1977.

#### PROGRAM ACTIVITIES

Program activities include maintaining, correcting, and updating data necessary for computing the payments, computing the amounts due, and making the payments. For Fiscal Year 1978, \$100.0 million has been appropriated for this purpose. As in FY 1977, \$200,000 will be available for administrative costs.

#### PROGRAM PLAN

##### Objectives

- Distribute funds to local jurisdictions for Federal lands as provided by law.

##### Action Plan

The authorization request provides increased funds each year to cover payments related to new land acquired as provided under Section 3 of the Act.



BUDGET AUTHORITY  
\$ Millions

	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>Four Year Authorization</u>	<u>Total</u>
\$100.0	\$105.0	\$108.0	\$111.0	\$114.0		\$438.0	
Positions							
--	5	5	5	5			



MINERAL IMPACT LOANS



## FOUR YEAR AUTHORIZATION

### MINERAL DEVELOPMENT IMPACT LOANS

#### GOALS

The goal of this program is to assist communities facing major impacts in terms of demands for public facilities and services in advance of the increase in tax revenues or distribution of mineral leasing receipts to pay for them.

#### BACKGROUND

Section 317(c) of the Federal Land Policy and Management Act of 1976, (90 Stat. 2743, 2771; 43 U.S.C. 1701, 1747) generally authorizes the Secretary to make loans to States and their political subdivisions to meet the impacts of development of Federal mineral resources before sufficient State and local revenues are generated by such development to accommodate the impacts. It provides that all loans shall bear interest at a rate not to exceed 3 percent.

On August 31, 1977, the Department forwarded to Congress a bill to amend Section 317(c)(1) of the Federal Land Policy and Management Act of 1976. The draft bill proposes to conform the rate of interest on a loan to the current average market yield on outstanding marketable obligations of the United States of comparable maturities during the month preceding issuance of such note and other obligations. In addition, the draft bill offers other provisions to afford the Secretary control over expenditures.

#### SITUATION

The Department is currently reviewing its coal policy and associated coal program. A decision on whether to utilize the loan authority provided by Section 317(c) will be made in conjunction with the review, but will also depend upon the outcome of the proposed amendments to Section 317(c).

#### PROGRAM PLAN

##### Action Plan

Authorization of funds for fiscal years 1979 through 1982 has been requested as a contingency item. Incremental increases are included based on the assumption that as coal production associated with existing leases increases, the funds needed to address the related impacts would also increase.



<u>BUDGET AUTHORITY</u>					<u>Four Year Authorization Total</u>
\$ Millions					
<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	
-	\$45.0	\$50.0	\$57.0	\$65.0	\$217.0
<u>POSITIONS</u>					
	5	5	5	5	

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Denver, CO 80225

U.S. DEPARTMENT OF  
BUREAU OF LAND  
BORROWER

HJ  
2005      Four year authorization  
.L362      1982.  
c.2      BLM

DATE LOANED	BORROWER

(Continued on reverse)

Form

